

# GRAIN & FEED JOURNALS

## CONSOLIDATED

*A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter*

### In This Number

Civic Minded Grain Merchants

Chicago Board Active for 90 Years

No Injuries; No Grounds for Damages

New Orleans Explosion

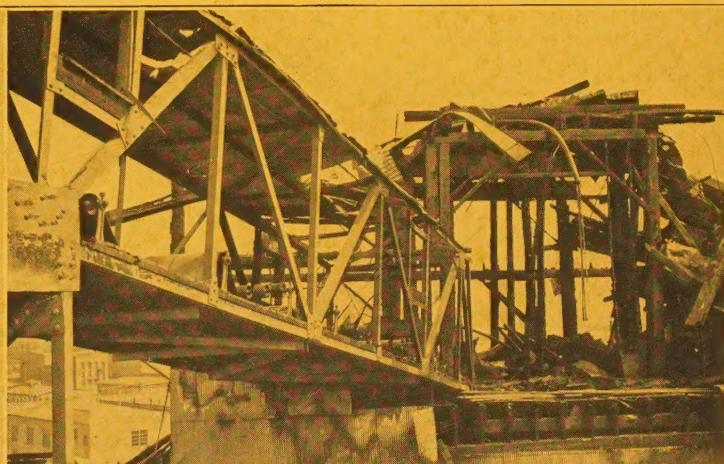
Car Dumper Operation

The Revolt of the Corn Growers

Increasing Competition for the Trucking Merchants

Grain Cleaning

Maintenance of Forgotten Structures



A Dust Explosion Literally Wrecked the Central Unit in the Fleischmann Malting Co.'s Plant at Minneapolis. Left, above and below: Cracked Concrete and Bared Reinforcing Rods where Concrete Bin Bottoms Joined Supporting Structure in Nos. 10 and 18 Tanks. Right: top photo shows Damage to Headhouse Cupola and a Conveyor Gallery; bottom shows General View of Concrete Storage Unit, and Cracks in Walls.

[See page 333]



# Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

*HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.*

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McKillen, Inc., J. G., consignments.  
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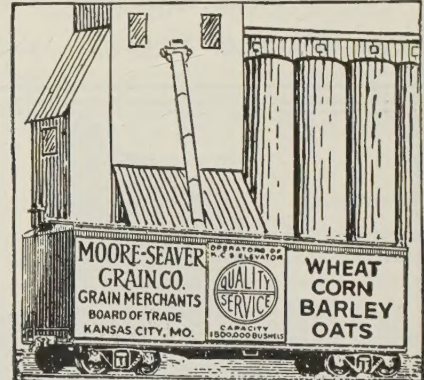
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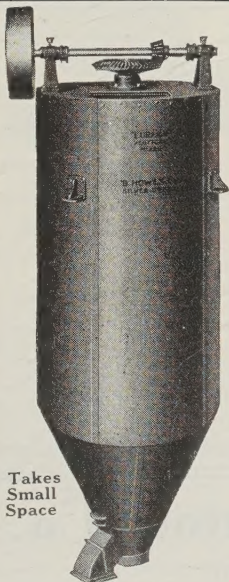
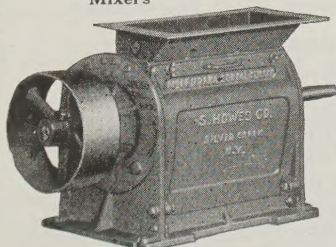
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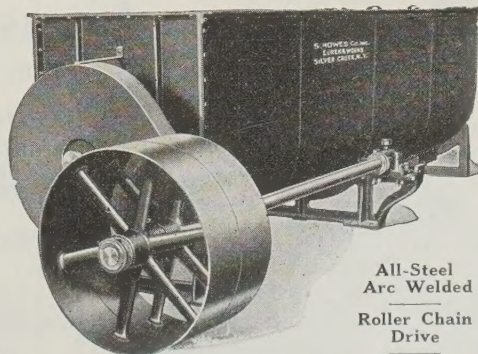
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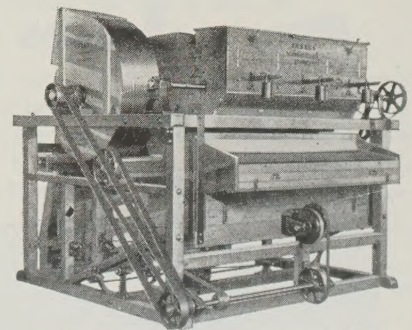
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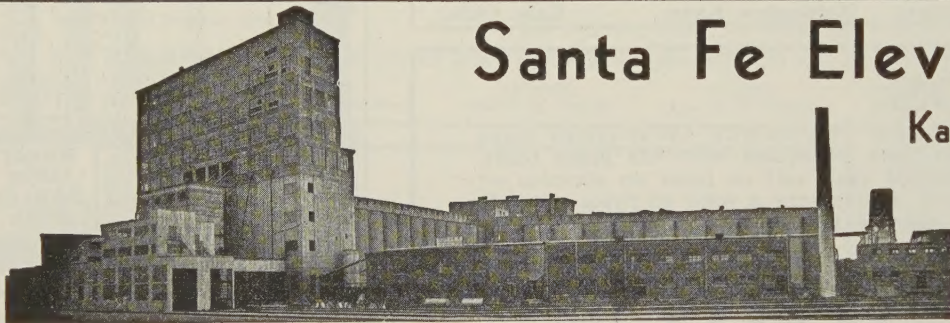
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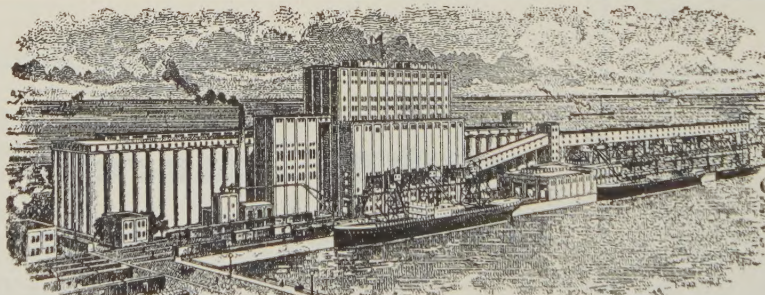
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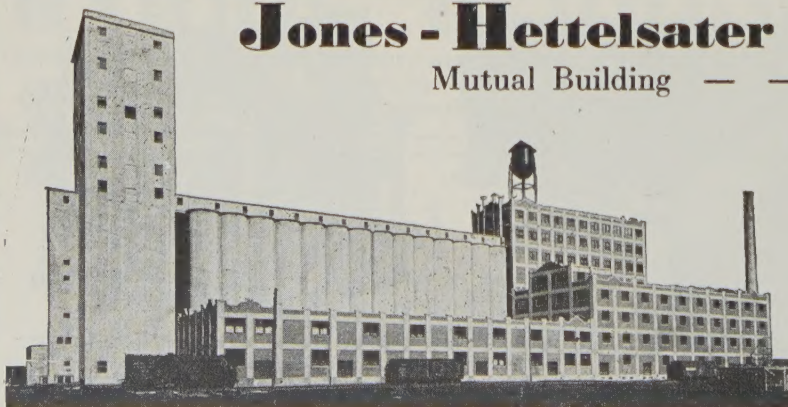
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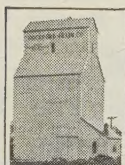
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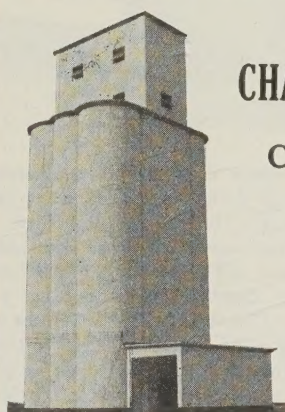
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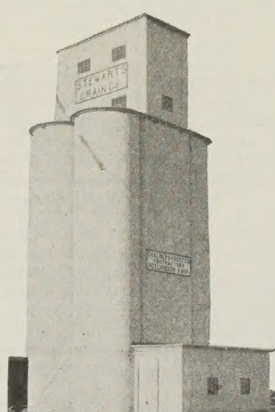
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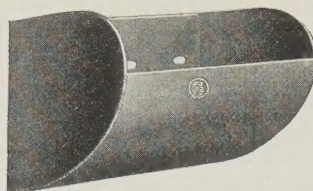
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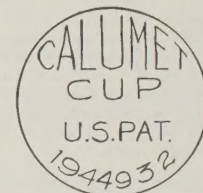
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## To BUY or SELL RENT or LEASE an ELEVATOR

Place an adv. in the "Wanted" or "For Sale" columns of the **GRAIN & FEED JOURNALS**, of Chicago. It will bring you quick returns.



# Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

## ELEVATORS FOR SALE

INDIANA elevator; June 1st possession; priced right; terms. Address 80HIO, Grain & Feed Journals, Chicago.

**ALWAYS HAVE GRAIN ELEVATORS for sale.** If you are in the market write me fully as to amount you wish to invest and location desired. James M. Maguire, 6440 Minerva Ave., Chicago, Ill.

MICHIGAN grain and bean elevator for sale, new and strictly modern; retail, feed, flour, seeds, coal, cement, lime, fencing; A No. 1 farming community. Address 80H9, Grain & Feed Journals, Chicago.

**NORTHWESTERN IOWA**—Elevator, cribs, good condition; 2 million pounds capacity; best popcorn producing section; Lake View, Sac County, Iowa; on C&NW Ry. Albert Dickinson Co., Lock Box 788, Chicago, Ill.

**NORTH CENTRAL OHIO** grain elevator, coal, feed and seed business; complete cleaning and feed mixing machinery; J-B Hammer mill; includes two acres of ground, dwelling, basement, furnace, two barns, large poultry house and garage; small town. P. W. Davis, Leipsic, Ohio.

**ORD, NEBRASKA**—Elevator, warehouse, cribs, cob house, two track scales; 3 million pounds capacity; good condition; irrigation project for 38,000 acres in this fertile valley will soon be finished; on Burlington and Union Pacific Railways. Albert Dickinson Co., Lock Box 788, Chicago, Ill.

**ILLINOIS—OUR MYRTLE AND HOLCOMB, ILL. YARDS, ELEVATORS, BUILDINGS AND MERCHANDISE FOR SALE.** GOOD OPPORTUNITY IN OLD SUCCESSFUL PROFITABLE LUMBER, COAL, GRAIN BUSINESSES IN SMALL NORTHERN ILLINOIS VILLAGES; PRICED LOW TO MOVE QUICKLY. HOLCOMB-DUTTON LUMBER CO., SYCAMORE, ILL.

**SOUTHEAST MISSOURI**—13,000 bu. grain elevator on Cotton Belt Ry. and leading highway; in town, 3,000; good grain territory; contains 9 bins; 1-30 h. p. and 1-10 h. p. Fairbanks-Morse motors; Clipper recleaner with 5 h. p. motor; office with new Fairbanks scales, 37,000 lbs. capacity with Weightograph; handled more than \$100,000 grain past 7 months; all machinery and buildings new; reason for sacrificing: bad health and unfamiliar with business; bargain at \$14,000 for complete outfit. Dunklin County Grain & Seed Co., Malden, Mo.

## ELEVATORS FOR SALE OR LEASE

PATTERSON, OHIO, grain elevator for sale or lease. Shawnee Finance Company, 1401 Cook Tower, Lima, Ohio. Telephone Main 2757.

## ELEVATORS WANTED

**WANTED TO BUY**—Grain elevator with side lines in good grain territory in north or north central Iowa; must stand investigation. W. H. Hubbard, Allendorf, Iowa.

## FLOUR MILL FOR SALE

MINNESOTA—80-bbl. mill for sale; in good running order; will sell complete or mill and machinery separate. Further details on request. A. Krieg, Sauk Rapids, Minn.

## SITUATION WANTED

**WANTED**—Position as elevator manager; 12 years experience; familiar with all kinds of seeds, feeds, coal and farm machinery; references. Address 80H5, Grain & Feed Journals, Chicago, Ill.

**WANT POSITION** as manager; 17 years' experience; competent to handle all side lines; familiar with Illinois-Indiana customs; age 42; reliable references; can change in 30 days. Address 80E13, Grain & Feed Journals, Chicago.

## HELP WANTED

**WANTED** competent and experienced man to take charge of grain elevator supply department of well established manufacturer of flour and feed mill equipment. Good opportunity for the right man. Address 80G18, Grain & Feed Journals, Chicago.

## BUSINESS OPPORTUNITIES

**FOR SALE**—50 bbl. flour and feed mill, also coal business; located on railroad siding; electric power. B. F. Nichols, Plainview, Minn.

## MISCELLANEOUS

**ALL ABOUT—SOYBEANS—THE WONDER FOOD**—Dr. Ferri's 64 page booklet, 35c postpaid. Modern Health Foundation, 1 N. Western Ave., Chicago, Ill.

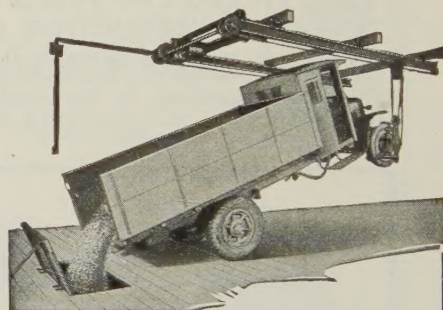
Some **SERVICE** to your ads. I sold my elevator to the first man that answered the ad. But I received a nice number of inquiries, too. Kansas Dealer.

## SAMPLE ENVELOPES

**SAMPLE ENVELOPES—SPEAR SAFETY**—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

## McMILLIN TRUCK DUMP

For Electrical Power



A dump that fills all requirements. Capacity from smallest wagon to largest truck. Dumps from any length vehicle into one dump door. By adding extension will dump into any number of doors. Operating connections at each door. Can be installed in almost any driveway. Installation simple and very reasonable. All parts of dump in plain view above driveway floor. Vehicles can be raised to any angle for dumping. Can be stopped and started as desired. Under complete control. All-steel power unit completely assembled. Substantially constructed. No delicate parts. **SPEEDY, SAFE and SIMPLE** in operation.

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525 Board of Trade Bldg., Indianapolis, Indian

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**GRAIN & FEED JOURNALS**  
CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

**Gentlemen:**—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

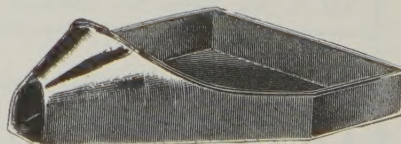
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## SAMPLE PANS



Formed by bending sheet aluminum, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of aluminum will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½x12x16½", \$2.00; Seed Size, 1½x9x11", \$1.65, at Chicago.

**GRAIN & FEED JOURNALS**

Consolidated  
332 So. La Salle St., Chicago, Ill.



**MACHINES FOR SALE**

**KEWANEE**—Air Lift for sale, complete \$100.00. San Jose Co-op Co., San Jose, Ill.

**CORN CUTTER & Grader**—has motor—used very little. 79N12, Grain & Feed Jnl's., Chicago.

**FEED MIXER**—one ton—floor level feed—has motor—good as new. Write 79N14, Grain & Feed Journals, Chicago, Ill.

**HAMMER MILL** with 25-h.p. motor and all attachments. Priced to sell. Write 79N13, Grain & Feed Journals, Chicago, Ill.

**FEED MIXER** for sale, has motor, and a late machine. Need space. Will sacrifice. Write 79N15, Grain & Feed Journals, Chicago, Ill.

**FOR SALE**—Rebuilt Attrition and Hammer Mills, Mixers, Corn Cutters, Engines, Motors, Etc. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

**FOR SALE**—One No. 3UX J. B. Hammer Mill and 40 h. p. motor complete with all accessories; in perfect condition; at less than half price. Davis & Stewart, Yale, Okla.

**FOR SALE**—20-h.p. Fairbanks-Morse motor and compensator, 220 volts, 60 cycle, 3 phase, 1,200 r.p.m., A-1 condition; will sacrifice. The Wadsworth Feed Co., Warren, Ohio.

**FOR SALE**—1 No. 10 Monarch E. C. Crusher, Left Hand Pulley, 20"x6". 1 20 h. p. Westinghouse Motor 60 Cycle, 3 Phase, 220 Volts, 1750 r. p. m. All this equipment has had very little use. Write 80G13, Grain & Feed Journals, Chicago.

**FOR SALE**—9x30 Double Roller Mill; 50 bu. Meal Dryer; Small Hammer Mill; Prinz-Rau Cylinder Oat Grader; 100 h. p. Motor; 9x24 Rolls only, Sharp; 9x18 Rolls only, sharp; Draver & Gaunt Feeders; Large Louisville Dryers. Schreiber Mills, St. Joseph, Mo.

**FOR SALE**—20" Monarch Attrition mill, two 10 h. p. motors, 3 phase, 60 cycle, 220 volts with starter; 18" Monarch corn cutter; Sprout-Waldron corn crusher; cyclone dust collector; lot of bucket elevators and worm conveyors, at a bargain. Edward Henning, Box 5915, Pittsburgh, Pa.

**FOR SALE**—1 No. 4 J. B. Feed Mill; 3 flour rolls, Barnard & Leas; 2 wheat separators; 4 reels, 1 bran packer; 1 50 h.p. motor; 1 dust collector; 1 hopper scale; 3 tons canvas belt; several wood and iron split pulleys and other pulleys, shafts, bearings, etc. Farmers Elevator Co., Canton, S. D.

**THE WANTED-FOR SALE DEPARTMENT** of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employee, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

**SEEDS FOR SALE**

**WHEN YOU** want field or grass seed, write us, and we will put you in communication with nearby dealers, who have what you seek. The service is free. Information Bureau, Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

**SCALES FOR SALE**

**SCALES**—Motor Truck, Warehouse, Dump, Tank and Hopper. Bargains, New and Used. All capacities. Shipped on 30 day free trial. Bonded Scale Corporation, Columbus, Ohio.

**WHENEVER THERE** is a real opportunity of interest to the grain trade, it is usually registered in the "Wanted—For Sale" columns of the Journal.

**MACHINES WANTED**

**WANTED**—Good used motor 3 h.p. 1750 r.p.m. 440 volt, 60 cycle, 3 phase totally inclosed type; one friction clutch pulley 12" dia. 4" face, bore 1 1/4. Address 80H8, Grain & Feed Journals, Chicago.

**MOTORS—GENERATORS****ELECTRICAL MACHINERY**

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSBAUM & CO., Fort Wayne, Indiana.

**SAVE on MOTORS and GENERATORS**

Write for new Free Catalog of guaranteed rebuilt Motors, Generators, Pumps, Compressors, etc. We Save you Half. Your Idle equipment taken in trade. Specials in totally enclosed motors, as well as other Bargains. Chicago Electric Co., 1331 W. 22d St., Chicago.

**REBUILT ELECTRIC MOTORS**—Save 50% on your motor cost and secure fully reconditioned motors—all types and sizes—one year guaranteed. High speed and enclosed motors for mill and elevator service our specialty. Complete motor repair and rewinding service. Send for Bulletin No. 55, thirty two illustrated pages of motors, compressors, etc., at money saving prices. Rockford Electric Equipment Co., 728 So. Wyman St., Rockford, Ill.

**STOP! READ! THINK!** One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

**Crop Delivery Records**

Designed particularly for grain dealers receiving a number of loads of grain from the same farmer, as when an entire crop is marketed by helpful neighbors. Simplifies and expedites recording of each load delivered. Two tickets to a leaf so that loads from two farmers may be separately recorded without turning a leaf. Lines for recording 23 loads on each ticket. Space provided at bottom of each ticket for total net pounds, net bushels, check number, and amount given in settlement. 120 tickets, size 5 1/4 x 8 1/2 inches. Duplicating. Originals of goldenrod bond paper, duplicates of manila. Spiral bound so that book lays absolutely flat, or may be folded back upon itself in open position to facilitate entries. Shipping weight 2 lbs. Order Crop Delivery Record Form 69 Spiral. Price \$1.20, plus postage.

**Grain & Feed Journals**

Consolidated

332 S. La Salle St. Chicago, Ill.

**THE NINETY AND NINE TAXES YOU PAY!**

—From the Tax Digest

**Duplicating Wagon Load Receiving Book**

Hauler	Gross	Tare	Net

This book is designed to facilitate the work of country buyers during the busy season when each farmer is delivering a number of loads daily. The above illustrates the half of the sheet which remains in the book. The outer half has the same rulings, but is printed on the other side of the sheet, so that when sheet is folded back on itself, and a sheet of carbon inserted, an exact duplicate will be made of each entry. Each page has room for name of farmer and 34 loads and is machine perforated down the middle so outer half may be torn out and given to the farmer or sent to headquarters of line company.

The book is 12 x 12 inches, check bound with heavy boards, contains 225 leaves ruled both sides, and nine sheets of No. 1 carbon.

Order Form 66. Weight, 4 lbs. Price \$2.60, plus postage.

Send all orders to

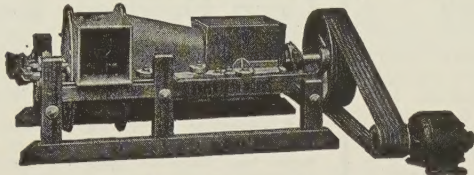
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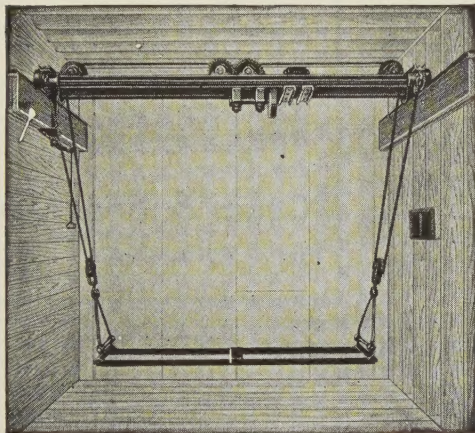


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— GRAIN ELEVATOR EQUIPMENT —



Western Pitless Sheller with Cog Belt Drive



Overhead Electric Truck Dump

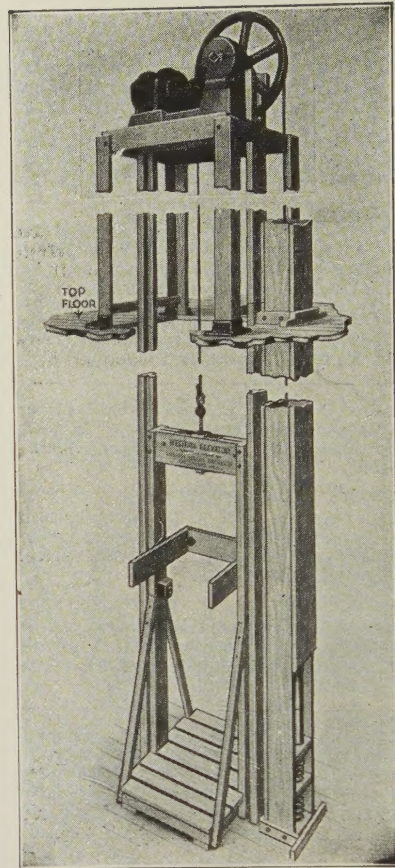
**UNION IRON WORKS**

**NEW**

The **ELECTRIC MANLIFT** takes its place alongside our Electric Truck Hoist and Motor Driven Corn Sheller.

*Write us for complete information and prices.*

DECATUR,  
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## GOOD LUBRICATION SAVES MONEY

ARE YOU RECEIVING FULL VALUE FOR  
YOUR LUBRICATION DOLLAR?

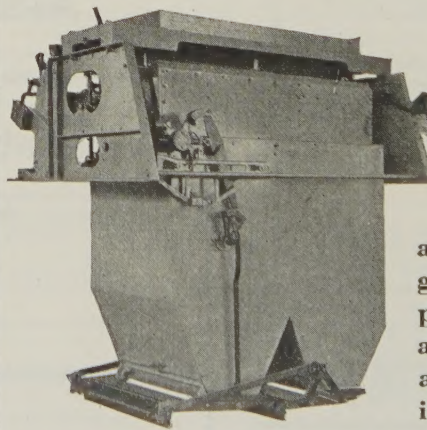
Ask Your "Mill Mutual" Insurance Office for  
a Lubrication Booklet, or Write to Us.

MUTUAL FIRE PREVENTION BUREAU

Department of  
ASSOCIATION OF MILL AND ELEVATOR  
MUTUAL INSURANCE COMPANIES

400 West Madison Street  
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## ARE YOU PAID FOR ALL GRAIN SHIPPED?



Load your  
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**RICHARDSON**  
Automatic  
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and be safe. It  
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# GRAIN & FEED JOURNALS

CONSOLIDATED  
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.  
Charles S. Clark, Manager

A merger of  
**GRAIN DEALERS JOURNAL**  
Established 1898

**AMERICAN ELEVATOR & GRAIN TRADE**  
Established 1882

**THE GRAIN WORLD**  
Established 1928

**PRICE CURRENT - GRAIN REPORTER**  
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

**SUBSCRIPTION RATES** to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

**THE ADVERTISING** value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

**LETTERS** on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

**QUERIES** for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., APRIL 27, 1938

SO MANY motors burn out because of accumulated dust and dirt owners should recognize the advantages of keeping their motors clean at all times. While the insurance may cover the cost of a new motor, it seldom covers the loss of business due to a lack of power.

**BREAKING** the seal on stored corn covered by a Government loan is a serious matter as is now being impressed upon Arthur Goeken of Marne, Ia., who has been sentenced to six months in jail for meditation. If he removed any grain who bought it, and what is buyer's responsibility?

SOME INDIANA farmers who have agreed to reduce their corn acreage 25% or 30% have purchased fertilizer by the carload and set their planters so that the corn rows will be closer than ever. These shrewd bucolics may reduce their acreage as agreed, but with the aid of fertilizer and closer planting are very likely to increase their production. The poor AAA.

STOLEN grain never becomes the property of the thief, so he has no title to transfer to the would-be buyer. Better investigate before paying strangers for grain.

THE EUROPEAN CORN BORER destroyed many fields in Connecticut and New Jersey last year and according to the investigations of the Bureau of Plant Quarantine will probably speed to new sections in 1938.

SPRINGTIME is the natural time to give the elevator a thorough house-cleaning and painting as well as the repairing and replacement of all worn out machines and machinery. Waiting until the crop starts to move to put your house in order is a very short-sighted practice.

SO MANY different agencies of the federal government are now lending money to farmers, buyers of farm products owe it to themselves to make every effort to keep track of liens on farm products to the end that they may not be called upon to pay for grain a second time. It has never proved profitable.

THE crop killing pessimists seem to find great delight in persistently predicting a scourge of white grubs, grasshoppers, June bugs, chinch bugs, green bugs, black rust, etc., but the growing crop and soil conditions continue to improve, so observing grain dealers expect to handle the largest crop in a decade.

PUBLISHED statements of large corporations to their stockholders containing accurate figures on the excessive burden of taxation should lead businessmen not so well equipped with accounting systems to consider carefully how much their own costs have been raised by taxation and governmental regulations. The margins taken to cover the cost of doing business five and ten years ago will not suffice at present. Those who neglect to revise their charges for service upwards will find themselves doing business without profit. In many instances it will be found necessary to advance the allowance for a dealer's overhead to 15 per cent instead of the old-time 10 per cent.

SAM EASTLACK, the manager of the elevator at Schaller, Iowa, has his heart set on receiving a larger volume of quality grain, so after holding a meeting to which all the farmers of his territory were invited, he introduced a specialist in grain diseases from the Agricultural College, who convinced his auditors of the great advantage of selecting and treating seed. Then Mr. Eastlack added to his grain cleaning equipment and installed a large capacity seed treating machine painted in attractive colors for his well advertised grand opening to which farmers flocked in large numbers. Needless to say, the grain crops of the Schaller territory will have a better start than ever this year.

ANOTHER PEDDLER (Lee Price, 28), operating a semi-trailer truck with a weight shifter was arrested at Elk Horn, Ia., while loading corn at the local elevator and at last reports was in jail at Harlan, Ia. Inasmuch as he claims to have been hauling corn to Kansas all winter many Iowa elevator operators must be short of corn.

LOCAL and group associations of country grain buyers are seeking to obtain relief from sharpers who try to sell them mortgaged grain by combining and obtaining weekly reports on all liens and chattel mortgages filed in adjacent counties. The protection afforded through frequent reliable reports on liens will always prove profitable to vigilant grain buyers.

FOUR EXPLOSIONS of grain dust in the last few weeks should spur elevator operators to provide better facilities for controlling dust. Keeping all parts of the elevator clean helps to prevent the dislodging of accumulated dust by the initial explosion and the succeeding explosions. The Fleischman plant of several buildings is reported to have been the scene of five distinct explosions.

AMERICAN EXPORTERS are shipping out more wheat and corn than the U. S. A. imported a year ago, trying to provide storage room for the bountiful crops now promised. Last week nearly seven million bushels of corn was started to Europe and the active demand is expected to continue indefinitely, so American farmers will find the careful selection and cleaning of seed as well as the use of fertilizer most profitable.

COB BURNERS are expensive to erect and their operation increases the fire hazard of the elevator, so the Pierceton, Indiana elevator company lets boys have this hot fire fuel when they agree to keep the cob house free from refuse. The enterprising kids sack the cobs and sell them for enough to keep them in spending money. This disposal is almost as economical as giving cobs to farmers who are willing to haul them away.

MORE COUNTY grain shows have been held during the last few months than ever and enterprising grain dealers have induced local merchants to offer attractive prizes for the highest grades of each kind of grain exhibited, with the result that many farmers have been proud to exhibit the products of their farms and have promptly resolved to plant only plump, clean seed of high germination. Comparison of the grain from different farms put some careless farmers to shame and urges all to exercise greater discrimination in the selection of seed and the preparation of the soil. The more thoughtful effort put into the preparation of competitive exhibits of grain the greater will be the ultimate results for both farmers and merchants.



IT GOES against the grain to plow up the splendid stand of wheat the farmer of the Southwest sees on his broad acres this year. Yet some farmers will have to plow up their good crop to earn benefit payments paid by the government out of social security and other taxes. In many instances the benefit payment of not to exceed 12 cents per bushel on normal yield will not equal the gain on the larger crop at 60 cents per bushel.

FUMIGATING weevil infested grain in box cars is accompanied with danger that many grain dealers seem to overlook. If carbon bi-sulphide is used and exposed to a spark or a flame a destructive explosion is quite likely to result. If hydro cyanic acid gas is used, all life that comes in contact with the gas is very likely to be exterminated. Placards warning car unloaders at destination of the presence of the dangerous gas should help to reduce the loss of life and property from the free use of toxic or explosive gases.

MIXING unsound, musty, fermented or sour corn with good corn is a violation of the United States Food & Drugs Act, according to Bulletin 159 issued early this month by the federal grain supervisor. Grain shippers of experience have too deep an interest in getting the highest grade possible for their shipments even to venture the mixing of unsound corn with good corn. Plugging shipments has always earned a low grade and a heavy discount. The only shippers who would dare to venture the mixing of spoiled grain with sound grain would be shippers without knowledge or experience. Those who have had shipments of good corn graded down because of a small mixture of unsound grain will not attempt such plugging a second time. It is too expensive.

THE CROP improvement champions of Jackson County, Minnesota, have succeeded in inducing the farmers of that county to produce more barley of the malting grade than any of the twelve southern Minnesota counties credited with producing 65% of Minnesota's malting barley. This encouraging result should enlist both producers' and dealers' support of every campaign designed to result in the production of a higher quality of malting barley. The maltsters are demanding barley of a much higher quality than formerly and much of the low grade stuff now cluttering the sample tables of the central markets does not win a second look. The selection of good seed and cleaning it thoroughly before planting will help materially in raising barley of the desired quality. The extra care and work required to increase the yield and improve the quality of the coming crop is infinitesimal when one considers the attractive premiums paid by maltsters for barley of superior quality.

THE MANY conventions announced in our Coming Conventions column this number offers the discussion of many problems now commanding the attention of grain dealers throughout the land. Not only do these conventions offer dealers much helpful information through listening to carefully prepared addresses, but the meeting with other dealers of experience affords an excellent opportunity to discuss other trade problems to the great advantage of all concerned.

THE GROWING popularity of the grain grading schools must be very encouraging to their promoters as well as to the grain dealers who learn to classify all grain more accurately. Shippers readily appreciate that grain shipped to central markets must be sold by federal grades and the more familiar they are with the requirements for each grade, the more will they receive for their shipments and the fewer and lighter will be their discounts. Dealers equipped with machines for cleaning grain will find it an easy matter to load each car with grain of quality. The practice of all licensed inspectors of giving each car the grade of the lowest quality contained must stimulate the desire of each shipper to avoid being suspected of attempting to plug his shipments. After a shipper establishes a reputation for plugging shipments, it is not an easy matter to convince inspectors that plugging is farthest from his desires.

### No Injuries, No Grounds for Damages

Feed and flour dealers generally will be glad to learn that the Arkansas flour merchant who sued the Pillsbury Flour Mills Co. for \$50,000 damages because a dead rat was found in a sack of Pillsbury's flour has lost his suit. No one familiar with modern milling methods or practices believes that a rat could get into a package of flour except by chewing its way through the container and in this case, the rat may have been raised on the premises of the plaintiff. The jury was out but a few minutes when it decided that the presence of the rat was not due to negligence on the part of the defendant; hence, plaintiff was not entitled to damages.

It is quite different from the New York case in which a butcher selling scraps from his shop to a poultry farmer permitted wires, used in fastening tags to meat, to become cut up with the meat scraps and sold to the poultry farmer for his ducks with most disastrous results. That was carelessness personified and resulted in the recovery of the value of the ducks.

However, many of the cases of this character have been pure blackmailing suits that have generally been thrown out of court.

### Increasing Competition for the Traveling Merchants

The individual traveling trucker without a known address or established reputation has caused much trouble for established merchants in many lines of business, but so many grain dealers and railroads are engaging in trucking either as merchants or truckers for hire that the irresponsibles without capital cannot hope long to survive. They have continued in the business not as a result of fair compensation for transportation, but as tricky traders who through short weights and rubber checks have cheated all who dared to deal with them.

The railroads and country merchants generally have suffered from the merchandising methods of these irresponsible nomadic peddlers and both will be glad to get all branches of the trucking business into fairer and safer hands.

### Chicago Board Active for 90 Years

As the grain trade westward pushed its way leadership among the grain exchanges of the United States has passed successively from the New York Produce Exchange, Buffalo Corn Exchange, Cincinnati Chamber of Commerce, Detroit Board of Trade, Toledo Produce Exchange and Milwaukee Chamber of Commerce to the Chicago Board of Trade, which recently passed the 90th milestone of its existence.

The grain merchants at these other centers were as enterprising as the 82 men who organized the Board of Trade in 1848, but the deciding factor of transportation by water and rail finally gave pre-eminence to Chicago, where members of the Board of Trade have discharged to the utmost the duty of developing an efficient marketing system by adopting fair rules for trade, providing dependable weights unquestionably accepted by buyers and sellers of grain, and in the early days a sampling and grading system now continued by the state and federal governments.

Grain warehousing was developed to the utmost and its warehouse certificates form the basis for worldwide trading in grain for future delivery.

Thruout its long history the Chicago Board of Trade has consistently striven to preserve competitive bidding for grain as the only method to guarantee to the producer the highest possible price for his grain. Under the wise regulations of the Board of Trade as administered by its elected officers none of the many attempts to monopolize warehousing, cash grain buying or future trading have been successful. It remains today as always a free market where one and all may participate on an equal basis.



## Protest Against Farm Control

So complicated was the Agricultural Adjustment bill that at the time it was being hurriedly rushed thru Congress by the bureaucracy the farmers who would be affected could not determine whether they would lose or benefit by its operation, especially since future conditions at that time unknown were to govern the bureaucrats in issuing regulations to regiment the farmers.

Now that the corn growers have individually been informed how many acres they will be permitted to plant, and how many bushels they will be compelled to hold back on the crop, under penalty, they are learning that co-operation with the A.A.A. in reducing acreage of soil depleting crops will cost them more in dollars and cents than the total expected benefit payments and loan privileges combined.

In Illinois and Iowa every county has its corn acreage cut while in the southern states very few counties are limited, this adding to the resentment of northern farmers whose earnings are to be shaved, while those in the south expand their corn acreage without penalty.

In Kankakee County, Illinois, not one out of 500 farmers present at a meeting voted to comply with the A.A.A. plan. In McDonough County an initial organization was formed to resist control, which is spreading fast.

Unknown factors such as the size of the Argentine corn crop, weather in the Corn Belt next summer and monetary and trade conditions make it impossible to forecast whether the individual corn grower is to benefit a little or lose much by reason of the A.A.A. control; but certain it is that the people as a whole will suffer from the control, in dollars and cents, both as taxpayers and workers, and as consumers, for the self-evident truth is that the A.A.A. control adds nothing to the sum total of the national wealth, but on the other hand deducts therefrom the wealth that would be produced on the larger acreage plus the cost of the salaried bureaucracy employed to enforce the control.

The reduction required by the A.A.A. spells less traffic for the railroads and general increased unemployment among

those usually handling the larger crops of corn.

## Big Turn-Out Expected for Des Moines Convention

A lively program that will interest every grain dealer has been prepared for the annual convention of the Western Grain & Feed Dealers Ass'n, which will be held Monday and Tuesday, May 2 and 3, at Des Moines, Ia., announces Sec'y Ron Kennedy. Grain dealers are expected to start gathering in Des Moines the afternoon and evening of May 1, and those who come early may expect plenty of company. The Hotel Fort Des Moines is convention headquarters.

The list of speakers that will enliven each session of the two-day convention includes:

CLAUDE WICKARD, Washington, D. C., director of the North Central Division of the A. A. A., who will outline the new farm program, including crop insurance, means of collecting the premiums, and the part that grain dealers will play in this aid for grain farmers.

CLARENCE HENRY, educational director, Chicago Board of Trade, who will reflect the "International Situation in Grain."

PHIL RUNION, sec'y, Nebraska Lumber Dealers Ass'n, who played a prominent part in securing passage of an itinerant trucker control law, will tell the "Effect of the Itinerant Merchant Bill in Nebraska."

WALTER SCOTT, sec'y, Kansas City Board of Trade, a well-known and widely lauded transportation expert, who will discuss "Transportation and the Grain Trade."

R. H. PORTER, head of the seed testing laboratory at Iowa State College, who reviews the "Effect of Seed Treating on Disease Control."

OTTO BAST, Minneapolis, pres. of the Grain & Feed Dealers National Ass'n, will peek thru the Capitol dome at Washington, to show delegates what effect "National Affairs" will have on their businesses.

HARRY IRWIN, Iowa State Chemist, will explain the purposes of the Iowa feed and seed laws and discuss "Feed and Seed Law Enforcement."

DR. CARL DRAKE, Iowa State Entomologist, expects the "Coming Grasshopper Outbreak" and will tell of the control measures for which machinery has been set up.

A PROMINENT FEATURE of the convention will be the open forum at noon the first day on the question "Shall a Country Grain Dealer Operate His Own Trucks?" A number of Iowa elevator managers who operate trucks have been lined up to appear in this debate, and will give their experiences, and, perhaps some data on their costs.

"DUSTY," MILLER a famous humorist from Wilmington, O., is the after-dinner speaker. He is guaranteed to make all delegates chuckle enough to settle the big banquet Monday evening, May 2. A high-class program

of vaudeville entertainment will follow him, and will be followed in turn by dancing until midnight. Warning enough to "bring the ladies with you!" Several special entertainment features have been organized for them. But the men will get a break. They will have their customary "dutch lunch" Tuesday noon, May 3. Advance reservations promise a big attendance.

## Danville Preparing Welcome for Illinois Grain Dealers

Danville is preparing a rousing welcome for the 45th annual convention of the Illinois Grain Dealers Ass'n, which this bustling eastern Illinois metropolis will entertain Thursday and Friday, May 12 and 13. Local com'ites as well as ass'n officials are busily engaged in putting the finishing touches on a convention program and entertainment that is guaranteed to make every delegate happy he attended.

LEE M. GENTRY, chairman of the Illinois Agricultural Conservation Com'ite, the leading speaker, will discuss the new Farm Bill. Says the ass'n's Sec'y W. E. Culbertson: "Upon him, more than any other man in Illinois, rests the burden of administering and interpreting the Agricultural Adjustment Act of 1938. This Farm Act provides a crop insurance program which is expected to be put in operation late this summer. Is it the intention of the government to let the elevators handle the grain accepted as premiums on this insurance thru their established facilities? Will the elevators be given a fair and equitable rate of payment for their service? If quotas are voted by grain producers, what part will the elevators play in the handling of grain sold under the quotas, and will they be required to act as collection agencies? These and other features of the Act will be explained by Mr. Gentry, and I would like to suggest that each and every grain dealer invite some farmer patron to attend the Thursday afternoon session as his guest. This will give the farmer whom the grain dealer brings an opportunity to see and get acquainted with the man who will administer the Act in Illinois."

RAY B. BOWDEN, St. Louis, executive vice-pres. of the Grain & Feed Dealers National Ass'n, whose reputation as a convention speaker, and whose knowledge of legislation and its effect on the grain business are too well known to require elucidation, will precede Mr. Gentry on the Thursday afternoon program.

C. D. KELLENBERGER, Alton, Ill., insurance official, who has an intimate knowledge of the accident and fire hazards that exist in the country elevator, will tell grain dealers how to protect themselves from these hazards.

THE CONVENTION will open officially at 10 o'clock Thursday morning, with a welcome from Danville's mayor, the annual address of Pres. L. B. Walton, of Mayview, the annual report of Sec'y W. E. Culbertson, of Delavan, and the appointment of convention com'ites.

A THEATRE PARTY has been arranged for the ladies Thursday afternoon. They will be the guests of the local managers of grain firms.

THE ANNUAL BANQUET will be held Thursday evening. Extensive plans have been made for an elaborate entertainment, Danville choosing not to be outdone by other convention cities, and having a high standard set by the entertainment the convention has enjoyed in previous years. "At the banquet there will be no speaking," says Sec'y Culbertson, "just eats and fun. Dancing will follow the entertainment and last until midnight. So be sure you bring your wife or sweetheart and let her enjoy the convention with you."

Other features will share the Friday program with the business of the grain dealers and the ass'n. No Illinois grain dealer can afford to miss a minute of the convention sessions.

Early indications promise a big crowd. Hotel Wolford is convention headquarters.

It is not what the best men do, but what they are  
that constitutes their benediction to their fellow  
men.

—PHILLIPS BROOKS.



## Asked—Answered

[Readers desiring trade information should send query for free publication here. The experience of brother dealers is most helpful. Replies to queries are solicited.]

### Aluminum Paint for Elevator Siding?

*Grain & Feed Journals:* Where can we purchase a good grade of aluminum paint for use on iron clad buildings?—Pesotum Elevator Co., Pesotum, Ill.

**Ans.:** Any of the reputable paint manufacturers can supply a good grade of aluminum paint. The better grades are made of a finer ground aluminum powder, or flake, and the costlier tung oil. Ready mixed a good grade should cost about \$3 per gallon.

The user can cut the cost by doing his own mixing, adding 1½ pounds of aluminum bronze powder to one gallon of spar varnish, the mixture costing less than \$2 per gallon.

### How Will Government Wheat Loans Be Handled?

*Grain & Feed Journals:* After the government starts making loans to farmers on their grain stored on the farm, grain will unquestionably have to be handled in a much different manner than at present. The government has made loans on corn in farm cribs, but it will probably demand that wheat be placed in elevators where it can be kept in proper condition, and it will probably require that elevators where the wheat is stored have a federal storage permit, or be bonded, to protect the government loans. More trouble for the country elevator operator.

It is understood that the government insurance plan contemplates re-delivery to farmers of wheat when a crop falls far enough below expectations to make payment necessary, and it will receive its premiums in wheat. Storage will be necessary, but no country elevator operator can afford to build increased storage space on the chance that the government will want it and be willing to pay enough for storage to justify the expense.

A clear, definite statement of its plans for storing wheat on which it makes loans, should be made by the Farm Loan Administration, so that grain dealers may know what will be expected of them.—E. W. M.

### Dust Explosions of 1937

The first dust explosion of 1937 was that on April 10 at 4 p. m. in the plant of the Chas. A. Krause Co., Milwaukee, Wis., when 7 men were killed and the property damage reached \$1,000,000. Corn mill, specialty mill, warehouse, concrete grain bins and feed manufacturing building were involved thru propagation of the explosion.

At Buffalo, N. Y., May 27, an explosion lifted off part of the roof of the elevator of the Kellogg Grain & Elevator Corp., hurling concrete into the street, but did little damage to contents.

At Atchison, Kan., August 28, an explosion on the fourth floor of the flour mill of the Lukens Milling Co., spread fire to three floors in a few minutes, burning the headhouse of the undamaged concrete grain tanks. Loss, \$150,000.

At Kansas City, Mo., Sept. 11, a dust explosion did little damage to the elevator of the Mid-Continent Grain Co., while burning the night watchman about face, hands and legs.

At Buffalo, N. Y., October 8, an explosion blew off the roof and several upper floors of the elevator operated by the Eastern States Farmers Exchange, injured three men and doing \$5,000 damage.

At Pekin, Ill., December 16, nominal property damage was done by a dust explosion. Starch in grits became ignited in a screw conveyor and the resulting explosion traveled thru the dust collecting system.

So far in 1938 dust explosions have occurred

in the plants of the Fleischmann Malting Co., Minneapolis, March 22; New Orleans Public Elevator, April 4; Ward Dry Milk Co., Albert Lea, Minn., April 9, and Farmers Grain Co., Grandin, N. D., April 20.

### Farmers Denounce Crop Control

Farmers to the number of 1,500 jammed the court room at Macomb, Ill., Apr. 18 to denounce crop control laws.

Voting on the question: "Are you in favor of crop control?" 866 voted no and 29 yes.

"Are you satisfied with your present corn allotment?" brought 41 yes and 824 no.

The Corn Belt Liberty League was formed, with Tilden Burg of Sciota, Ill., as president and G. C. James of Good Hope sec'y-treas. A regional meeting is being arranged for Apr. 27.

Mr. Burg said: "Enthusiasm shown at the meeting proves the organization will sweep not only the state, but the entire middle west. Farmers everywhere are against this thing. They've simply got to organize to make themselves heard."

"The farmer doesn't want politicians telling him how to run his farm. He has been misrepresented and misquoted. Now he's going to have a chance to state his case."

A resolution was adopted condemning corn allotments as "absolutely ruinous to the farmer." It was announced that determined opposition will be maintained against any effort to prosecute for failure to obey the federal farm control law.

### Kansas City Will Hold Grading School

The Kansas City Board of Trade will hold its second annual grain grading school on Sunday, May 1. Invitations to attend have been extended to grain dealers and other interested parties thruout the Kansas City trade territory. The school will be held on the trading floor of the Kansas City Board of Trade building.

Co-operating in giving instruction at this Board of Trade sponsored project are the educational extension service of the U. S. grain supervision, the Kansas State College extension department, the Kansas State Grain Inspection Department and the Missouri State Grain Inspection & Weighing Department.

The program will open with remarks by E. C. Meserve, Jr., vice-pres. of the Board of Trade. Then will follow a brief review of the purpose and objectives of the school by W. B. Combs, Chicago, of the extension division of the United States Department of Agriculture, and practical instruction in analyzing and grading wheat.

Just before the luncheon, which will be served by courtesy of the Board of Trade, Jess B. Smith, pres. of the Southwest Wheat Improvement Ass'n, and Dr. John H. Parker, of the Kansas State College, will discuss the mixed wheat problem in Kansas and means for eliminating it.

Scott Bateman, Kansas State Warehouse Commissioner, will take up warehouse laws and practices at the opening of the afternoon session, and will be followed by a practical study in analyzing storage damage wheat. Next will be demonstration of the mechanical grading factors in Kansas wheat, and instruc-

tions in analyzing samples of damaged corn.

Grain grading practices of country elevators will be exposed by Vance M. Rucker, Kansas State College, as the last feature on the program and will be open to general discussion before adjournment.

### Another Trucker Caught in Fraud

In spite of the white light of publicity that has disseminated information about their tricks, some truckers still attempt to work weight frauds on grain dealers with special weight shifting devices on their trucks.

Lee Price, 28, of Kansas City, Mo., is the latest to be caught. He was arrested at Elk Horn, Ia., on April 18, charged with attempting to defraud the elevator in purchasing a load of corn.

Price was driving a large, semi-trailer truck. While the truck was being loaded at the elevator it was discovered to be fitted with means for shifting the connection between the tractor and the semi-trailer so as to change the weight in favor of the buyer.

Price, alone in the truck, was lodged in the jail at Harlan. He had been buying corn in Iowa and trucking it to Kansas feeders.

### Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same occupation. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Apr. 30. Western Seedsmen's Ass'n, Hotel Paxton, Omaha, Neb.

May 2, 3. Western Grain & Feed Dealers Ass'n, Des Moines, Ia.

May 9, 10. Northwest Retail Feed Ass'n, Nicollet Hotel, Minneapolis, Minn.

May 12, 13. Illinois Grain Dealers Ass'n, Hotel Wolford, Danville, Ill.

May 13. Oregon Feed Dealers Ass'n at Portland, Ore.

May 16, 17. Kansas Grain, Feed and Seed Dealers Ass'n, Hutchinson, Kan.

May 18, 19. Oklahoma Grain & Feed Dealers Ass'n, Youngblood Hotel, Enid, Okla.

May 20, 21. Texas Grain & Feed Dealers Ass'n, Fort Worth, Tex.

May 23, 24. Panhandle Grain & Feed Dealers Ass'n, Amarillo, Tex.

May 26. Missouri Grain Dealers & Millers Ass'n, Kentwood-Arms Hotel, Springfield, Mo.

May 31-June 1. Pacific States Seedsmen's Ass'n, Portland, Ore.

June 6-7. Central Retail Feed Ass'n, Schroeder Hotel, Milwaukee, Wis.

June 9, 10. American Feed Manufacturers Ass'n, French Lick, Ind.

June 17. Pacific Northwest Grain Dealers Ass'n, Davenport Hotel, Spokane, Wash.

June 15-18. Southern Seedsmen's Ass'n, John Marshall Hotel, Richmond, Va.

June 20-23. American Seed Trade Ass'n, Detroit, Mich.

June 27, 28. Ohio Grain, Mill & Feed Dealers Ass'n, Deshler-Wallick Hotel, Columbus, O.

Sept. 26, 27. Tentative dates for Grain and Feed Dealers National Ass'n, Royal York Hotel, Toronto, Ont.

Sept. 29, 30 and Oct. 1. Pennsylvania Millers & Feed Dealers Ass'n, Ritz Carlton Hotel, Atlantic City, N. J.

Apr. 2, 3, 4, 5. Society of Grain Elevator Superintendents of North America, Milwaukee, Wis.



## New Orleans Explosion Caused by Motor Burning Out

Many injured men are still in the hospital suffering from burns and injuries in the dust explosion at the New Orleans Public Elevator on Apr. 4, when five men were killed, as reported on page 283 of last number.

Damage to the building was not so extensive that operations could not be resumed within a week.

An investigation of the dust explosion in the public grain elevator at New Orleans, La., April 4 was conducted by John McKay, general manager of the Dock Board, assisted by city, state and federal officials, who questioned 50 employees of the elevator.

Mr. McKay reports that the explosion was caused by an ignition of grain dust when an electric motor burned out. This motor drove one of the dust collector fans. In his report Mr. McKay said:

"The motor is a 35 h. p., three-phase, induction type, squirrel cage motor, self-ventilating, and was operating at the time the explosion occurred. This motor was thoroly overhauled in the early part of January, new bearings installed and all coils tested and no defects existed at that time.

"The motor is one of the motors originally installed at the time the elevator was constructed. From the location of the motor, all of the physical evidence indicating the primary ignition of the dust in its immediate vicinity, statements of employees to the effect that they first saw the fire in shippers' legs one and two, I am compelled to the conclusion that dust arising from the handling of corn at shipper two was in the air around this motor in explosive quantities at the time this short circuit occurred and there is no doubt in my mind but that the explosion was due to this burning out of the coil connection in this motor."

The Supreme Court of the United States on Apr. 11 refused the government a review of the circuit court of appeals decision invalidating the Bankhead control act, in favor of Lee Moor, a Texas planter resisting the cotton ginning tax. Refunds of taxes collected under the act may amount to \$1,562,097.

## From Abroad

**France**—A new French decree authorizes importation of 30,000 metric tons of durum wheat.

**The Argentine** government has granted grain exporting firms exemption from the law against working on Saturday afternoons, as to indispensable shipping and management personnel.

**Ottawa, Can.**—Canadian mills ground 3,819,153 bus. of wheat during February, compared with 4,515,114 bus. during February a year ago.—R. H. Coats, Dominion Statistician.

**Yugoslavia** area sown to winter grain for the 1938 crop estimated as follows, with 1937 comparisons in parentheses: Wheat 5,223,000 acres (5,342,000), rye 530,000 (544,000), barley 565,000 acres (605,000).—International Institute of Agriculture, Rome.

**France**.—Individuals, companies or groups engaged in buying or selling wheat for seed may be authorized to import foreign soft wheat to compensate for prior exports of seed wheat, according to a ruling of the French government that became effective Feb. 17.

**Argentina's** first official 1937-38 corn estimates are reported by Agricultural Attache P. O. Nyhus as follows, with 1936-37 comparisons in parentheses: Area planted 15,318,000 acres (15,973,000), area harvested 7,529,000 acres (11,929,000), production 177,155,000 bus. (359,615,000).

**Italy** has imported less than 2,000,000 bushels of foreign wheat since Aug. 1, 1937, compared with 34,500,000 bushels during the same period a year ago. The imports are being shipped from Hungary, Yugoslavia and Czechoslovakia, it is reported. Normally, Italy imports from 10,000,000 to 20,000,000 bushels of foreign wheat.

**Contracting** 800,000 bus. special No. 4 wheat from Toronto to Fort William, of which 200,000 bus. arrived Apr. 19 on two boats, for delivery on Winnipeg May may be one reason for the slowing up of the advance in the Winnipeg May Future. From a close at 128¾ Apr. 8 Winnipeg dropped to a close at 124¾ Apr. 21, while Chicago May declined only from 84½ to 84¼.

## Federal Crop Insurance

Henry A. Wallace, sec'y of agriculture, in a broadcast over the N.B.C. Apr. 19 said in part:

If half of the nation's wheat acreage should be insured, the program would set aside in a few good crop years from 50,000,000 to 100,000,000 bus. of wheat.

The insurance reserves can't pile up surpluses like the Farm Board did when it had to dump its supplies. The size of the crop insurance reserve is limited by law to the amount of wheat needed to pay losses. The wheat in the reserves is to be used for one definite purpose, and that is to pay losses. No price-pegging is involved. This program is not wheat price insurance. It is wheat yield insurance. It insures that the farmer will have the equivalent of a half or three-quarters crop to sell.

The wheat grower himself pays in enough to cover average crop losses over a period of years. The government pays the administrative costs and the costs of storing the reserve. The cost of insurance to the farmers depends in part upon the crop loss experience for his farm and in part upon the crop loss experience for the county in which his farm is located. The A.A.A. records on yields were vital in supplying this information. The cost of insuring three-fourths of an average crop will be about one-half bushel an acre per year on the best wheat land; 1 to 1½ bushels on good wheat land; and 2 to 2¾ bushels on high risk land.

The crop insurance program fits into the usual way of marketing wheat. It will not need any new elaborate marketing system. The premiums can be paid by the farmers as they sell their wheat. The reserves will be stored in the elevators just as wheat is now stored. Wheat that is sold to prevent deterioration will simply be replaced with new wheat.

When the farmer pays his premium he can take his wheat to the elevator as he always does, and have a separate warehouse receipt made out for the number of bushels needed to pay the premium. Or he can pay cash, and the Corporation will immediately buy enough wheat for his premium.



The Workhouse of New Orleans Public Elevator lost many windows; the Conveyor Gallery lost side walls close to head house.—Photo by Times-Picayune.



## Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. Dealers having anything to say of interest to members of the grain trade are urged to send it to the Journals for publication.]

### Farmers Reducing Acreage but Not Production

**Grain & Feed Journals:** It is estimated that 80% of the corn planted in this district will be hybrid corn. Farmers are narrowing up their rows and using fertilizer so that the "White Father" in Washington restriction on the amount of acres a farmer shall plant, will be fruitless, in lowering the total amount of corn raised if everything works out as it does in normal years. Some farmers, who restricted their acreage on their farms last year so they could benefit by the Soil Conservation Plan, used 400 lbs. of fertilizer to the acre and yields in Southern Indiana, where the ordinary yield is 30 to 40 bushels to the acre, were 80 to 110 bus.—Goodrich Bros. Co., P. E. Goodrich, Pres., Winchester, Ind.

### Why Not Systematic Maintenance Control

By W. H. KAMP, Superintendent Ralston Purina Co., Kansas City, before Society of Grain Elevator Superintendents.

We are vitally interested in the handling and mixing of grains at the lowest possible cost per bushel, or the lowest possible cost per ton of feed manufactured. To do this we are confronted with the problem of organizing or co-ordinating men and machinery.

**Costly Machinery Failures.**—Isn't it true that if we have frequent interruptions in our production schedules by machinery failures our costs for handling bushels of grain or tons of feed will immediately skyrocket? You, as well as I, know this to be true and since you do know this to be true, why not do something about it?

**Why Not organize or plan a system of inspection** for the maintenance of your machinery? This is as simple as organizing a crew of men. There are various systems that might be considered.

(1) A system whereby the machinery is allowed to break down and then be repaired. My comments on this system are that this is really no system at all.

(2) A system whereby we expect any man about the plant to report a piece of machinery not working properly and then arranging for the shutdown so that it can be repaired.

The failure in this system is that altho it was possible to arrange for a convenient shutdown it was too late and it necessitated major repairs when it might have, with a proper inspection system, resulted in only minor repairs.

(3) A system whereby a complete inspection of all machinery is made every three months over the entire plant and elevator. This system is a great improvement over the other two, and will avoid many major repairs by taking care of the minor repairs as they are discovered in these inspections.

(4) A system whereby a complete inspection of all machinery is made once a month. This we believe is the ideal type of inspection and is worthy of a little more explanation.

Whether you adopt the last mentioned type of inspection with the card index for your records, or arrange one to your own liking, the first step in any system would be to list on a memorandum all the machinery in the plant. List all the information on the nameplate of the machine, as to name of the maker, size, style, type, etc., of every piece of ma-

chinery. After this necessary information has been gathered on all the machinery over the entire plant or elevator, the next step is to record the same information on the card index system, provided the card index system has been decided upon for the permanent records. After all the information has been transferred to the cards, a card for each piece of machinery, the next step is to designate a man to make these inspections, a man who is capable of handling the job, such as the superintendent, maintenance foreman, millwright or a skilled mechanic familiar with the machinery. It is suggested that the same man make all the monthly inspections so that he may be able to tie in one month's inspection with the next and recheck some peculiarity that he may have observed on inspection the previous month.

**After an inspection**, the date of inspection should be recorded on each card. If there were no repairs on a certain piece of machinery then the inspection date only should be shown on the card. If repairs are made they should show on the card with the date when completed. With this record any reference to these cards will reveal the type of repairs and the date on which they were made, or the date of inspection when no repairs were necessary.

It is not my intention to leave you with the impression that these monthly inspections are all that are necessary. While being around and about the plant or elevator many inspections are made every day on certain types of machinery and the monthly inspections are a necessary follow-up to be sure not to forget any and all parts and pieces of machinery in the entire plant.

I believe you will agree with me when I say that it has cost your employer large sums of money in lost production time, due to major repairs, when with an inspection system as outlined above they might have been only minor repairs.

Is it not your duty to your employers to organize some sort of an inspection system that will warn you of the minor repairs and avoid major repairs? You and I are looking for low production costs, but this is impossible with lost time due to machinery failures.

It does not make any difference whether you use the above system of inspection, or whether you arrange some other system, so long as the system adopted serves your purpose best, and saves you the most money. Any system is better than no system at all.

**In conclusion**, let me add that our aim as elevator superintendents is to handle and mix grains at the lowest possible cost per bushel. If our production costs are high it may be that our system of maintenance needs reorganization. If our production costs are low and we have no system of maintenance control, isn't it possible that with some kind of system we will still farther lower these costs?

**Plant development** and sap activity of wheat, corn and oats at different temperatures between 45 and 105 degrees have been compiled in a table by H. C. Donovan of Thomson & McKinnon.

**Olathe, Kan.**—A farmer a few miles from here has a machine shop in a cow barn, where he builds combines of his own design, a design that permits the machine to be raised or lowered readily so that the tops of one crop may be harvested when another crop of later maturity is growing underneath.

### Superintendents Must Study Wheat Varieties

By F. W. LAKE, vice-president, Continental Grain Co., before Society of Grain Elevator Superintendents, Kansas City

A gradual but continuous change in the varieties of wheat grown all over North America, particularly in the Southwest, which territory is more closely under my observation has occurred. In this section, old varieties have been mixed and new varieties have been established. Some of the new varieties were developed for the purpose of obtaining greater yields in bushels per acre, as well as for resisting crop plagues, and at the same time retaining the best milling qualities.

Shifting of varieties, as well as quality, from time to time, as the result of the effect of extreme weather conditions, has developed an irregularity and lack of uniformity in baking results, which occasions closer laboratory supervision. We, as merchants, are already beginning to feel the effect of the more technical demands of bakers upon millers, and it seems obvious that for best results during the coming season elevator operator merchants will be forced to inform themselves more thoroughly on the baking qualities of the wheat they purchase and store, in order that it may be placed in bins under a system whereby, it can be loaded out according to the specifications required by mills.

I am fully cognizant of the fact that at the present time wheat is stored according to the grade, test weight and protein; but, this new development, which is one of paramount importance, will require that we go one step further in providing a more dependable service to mills.

**The new factor** has to do with the quality and elasticity of gluten, in addition to the quality of protein. As has been proved many times in the last few years, the strength of wheat, according to protein alone, is not a sufficient indication that the wheat will mill into a high grade baker's flour. The baking industry has developed into larger and more efficient units to a point where uniformity in the flour, because of their increased efficient operation, is of major importance.

For instance, take a bakery that from its own experience gets the best results from dough of a certain definite gassing power and fermentation period. If it receives a flour sufficiently uniform in these requirements, the baker is highly pleased; whereas, if the flour received from the same mill varies too much in these requisites, the results are too seriously affected for the baker to tolerate further shipments of flour of such diversified characteristics.

Therefore, mills which do not have their own buying supervisor and are not equipped for laboratory research, will have to depend upon the milling wheat merchants to supply them on an equal and competitive basis with those better equipped. So, elevators should and will be required, in order to justify their existence as merchants of milling wheat, to furnish such standards of wheat as the various mills need to serve their trade with a uniform and dependable flour; based, of course, upon the assumption that without the proper raw material the miller cannot produce the proper product in flour.

As was the case at the time of the inception of the sale of wheat on a protein basis, the grain and elevator trade may be slow to recognize the necessity of adjusting themselves to this new feature.

**It happens that I was among the first** to market wheat on a broad scale upon a guaranteed protein basis. This was not an entirely original idea, because the suggestion of such a program came about in much the same way as this new factor mentioned above; that is, at that time bakers and flour buyers demanded of the mills a flour of a certain guaranteed strength. Wheat had previously been sold as



ordinary, semi-dark and dark, and a miller had no way of knowing whether he was in position to furnish uniformity and a definite degree of strength until after he had bought and received the wheat; even then, in some instances, he was still unaware of the protein content, because most of the mills did not have their own laboratories and often did not know how close they came to fulfilling the requirements of the bakers unless informed by the bakers themselves.

No longer can a merchant operate successfully by assuming that he can market his stocks to best advantage by merely accumulating a number of varieties equivalent to his capacity, then calculate what grade and protein it will make when mixed together, and sell the resulting grade as a dependable standard of wheat. The question of variation in the quality of wheat of the same grade and protein has been proved definitely to be not just a theory.

We find ourselves to some extent marketing wheat in much the same manner as some mills market flour. In the past, the brand on the sack sold the flour, regardless of whether the content was uniform thruout the year or not. With bakers at least such a condition can no longer obtain, because of the necessity of a well defined article to produce best results.

**Kansas wheat.** when spoken of in terms of "Kansas wheat" of the best quality carries to the mind of the consumer something of a high standard and dependable quality, but at times for certain uses this Kansas wheat has been blended with other wheat, particularly further east when wheats in those areas contained a fair average quality of gluten. Many of you who are familiar with the hard wheat grown in that section this year, are aware of the fact that considerably less of this wheat could be used with the Kansas wheat as a blend, compared with other years, because their crop this year showed relatively a lower quality of gluten, based on the same protein strength. Altho you and I both know the bulk of the Kansas

wheat is of a high standard of quality, still there is wheat grown in Kansas that would not measure up to the high standard that prevails in the minds of some millers who are far removed from this section and assume that all Kansas wheat is standard hard and high protein.

In Kansas, considerable soft red winter and mixed wheat is grown. While the gluten quality factor is not quite as important in the soft red winter and mixed wheat, it is of some importance nevertheless. This condition, also obtains elsewhere, particularly in Canada. Many millers have the idea when you mention Canadian wheat that they grow nothing but No. 1 dark northern spring Manitoba, whereas they raise other grades and varieties, especially a type of wheat called "Garnet" that is very beautiful to look at, uniform of berry, heavy in test weight, fairly strong in protein, but still very deficient in gluten quality.

If the farmer grows more wheat than his allotment calls for this year, but makes a corresponding reduction in the acreage of other soil depleting crops, there will be no wheat deductions from the payment he earns under the conservation program. The thing to bear in mind in this connection is that, for example, corn and oats are soil depleting crops, and the grower may preserve his wheat acreage by further decreasing his corn and oats acreage.—Bartlett-Frazier Co.

The hearing on a complaint filed by Cargill, Inc., against the Chicago Board of Trade for alleged manipulation of September corn prices which was scheduled for April 18 has been postponed at the request of Cargill, Inc., until May 16. The hearing will be held before a referee to be designated by the Commodity Exchange Commission, consisting of the Sec'y of Agriculture, the Sec'y of Commerce, and the Attorney General. The Commission has been requested to hold the hearing at Chicago.

## The Fleischman Malting Co. Dust Explosion Loss

When the smoke and the flames had died away from the ruins left by the March 22 dust explosion at the central unit of the Fleischman Malting Co.'s grain storage plant in Minneapolis' industrial district at Erie and Delaware St., S. E., investigators began an inspection of the damage. In the water-soaked, blackened and twisted skeleton of the headhouse and conveyor galleries, and in the cracked concrete of one set of grain storage tanks they found a great mass of evidence testifying to the irresistible heat and accumulative force of a severe dust explosion.

The cribbed headhouse, which observers say showed the first evidence of explosion, was little more than a charred skeleton, its top literally blown to bits, wrinkled steel sheeting clinging to the cribbed structure that stood forlornly on heavy timbers that had been the frame inclosing the workflow. Around this ruin lay a great windrow of pieces of machinery, twisted steel sheeting, charred pieces of wood and debris, as tho it had been drifted like sand before a gale. Under the debris lay the crushed ruins of the tiny office where the charred remains of Lloyd E. Currier, plant office superintendent, and David E. Sherper, state weighmaster at the plant, were found.

The steel framework of the conveyor galleries, where they joined the headhouse, was laid bare, revealing the broad grain conveyor belts, festooned desolately over the pulleys of the warped conveyor frames.

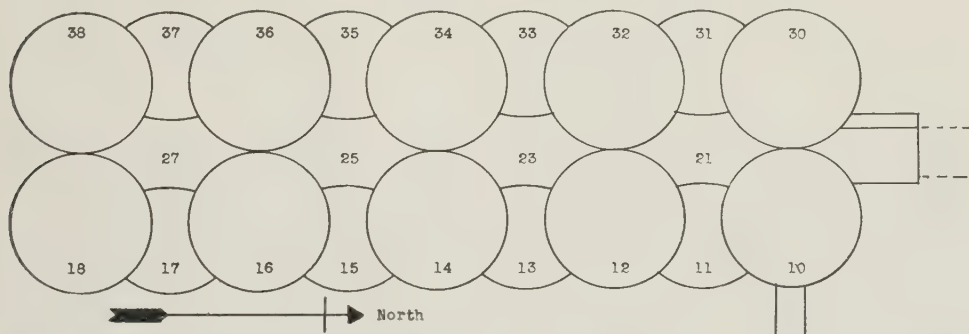
Conveyor galleries and conveyor tunnels connected the headhouse with a malt house on the north, a series of steel tanks on the west, and a nest of concrete tanks on the south. The greatest damage to the storage space occurred in the 10 concrete tanks and 12 interspace and pocket bins.

The fact that 17 of these concrete bins were empty, and that others carried relatively small quantities of grain, offered little resistance to the expansive force of the explosion. The damage was greatest in the empty bins. The tops of several of the tanks and pocket bins were completely blown off, or laid back over the roof of the conveyor gallery. At several points along the walls of the tanks and bins great seams opened horizontally in the concrete almost completely around the structure. Concrete footings crumbled. In the conveyor tunnel and in the basement seams opened where the hopped bin bottoms joined supporting concrete beams and piers. The bottoms of some of the interspace bins were completely blown out.

Only about three tankfuls of grain were in storage in this entire nest of tanks and bins, and this quantity was distributed thru four tanks, and three interspace bins. The grain caught fire, smoldered and smoked from the opened tops of the bins. Temporary grain handling equipment was set up as quickly as possible and the smoldering grain drawn off to prevent further damage to the tanks.

The work of clearing up the debris and estimating the damage accurately is under way, and it is reported that the Fleischman Malting Co. is already laying plans for replacing the concrete storage and the headhouse with a new structure, to be made as safe from dust explosions as modern science and modern dust control systems can make it.

**Washington, D. C.**—The signature of President Roosevelt on S. 3105 has extended the Commodity Exchange Act to include "wool tops," a commercial term applied to sorted, scoured, carded and combed wool. Heretofore the Act has applied only to futures trades in grains, cotton, rice, butter, eggs, potatoes and millfeeds. Futures trading in wool tops is conducted by Wool Associates of the New York Cotton Exchange, Inc.



Plan of Tanks and Interspace Bins That Were Severely Damaged in Dust Explosion at Elevator of Fleischman Malting Co.



Left: The Roof Was Blown Off Tanks and Pocket Bins of Concrete Storage Unit. Right: What Was Left of the Headhouse of Fleischman Malting Co. Elevator at Minneapolis After Dust Explosion. [See outside front cover.]



## Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Bethany, Mo., Apr. 22.—Wheat acreage 50%, condition 95; oats 100%, condition 95%.—Bethany Mills & Elevator Co.

Ft. Worth, Tex., Apr. 23.—A few county agents report presence of red and black rust and green bugs.—Ralph Strader Grain Co.

Rockport, Ind.—Growing wheat in Spencer and adjoining county is looking good and indications point to as good, if not better yield than last year. The oats crop also is looking good.—W. B. C.

Chickasha, Okla., Apr. 23.—Wheat acreage about 10% larger than last year. Condition good, but subsoil moisture is short. We think our damage from freeze is about 20%. No wheat on farms.—Expansion Grain Co., J. H. Snyder.

Colony, Kan., Apr. 22.—Wheat condition 10% above normal with nothing abandoned. Flax acreage 130%, condition 100%. Oats acreage normal, condition 90%. No rye. Corn planting just starting, acreage 75%.—Colony Elevator Co.

Decatur, Ill., April 23.—Condition of Illinois winter wheat is above normal for this season of the year. Generally wheat is stooling well; ranging from four to eight inches high. Some early planted fields are beginning to joint.—Baldwin Elevator Co.

Duluth, Minn., Apr. 21.—Field work and seedling has been the chief item on the farmer's mind and its reflection is noted in a slower and lighter movement of grain of late. Completion of this work will likely witness a resumption of early marketing of farmers' surplus grain.—F. G. C.

Winchester, Ind., Apr. 16.—Early sown oats are up. Oats planted on poorly prepared soil just before the heavy rains are reported rotting instead of growing. From 80% to 90% of the early sown clover is reported to have survived the heavy frosts.—P. E. Goodrich, Goodrich Bros. Co.

Kansas City, Mo.—Average protein of 181 cars of wheat tested by the Kansas inspection department in the week ended Apr. 22 was 13.75% and 167 cars tested by Missouri averaged 12.73%. The 348 cars tested by both departments had an average of 13.23%, compared with 13.57% for 206 cars the preceding week and 13.86% for 132 cars a year ago.

Decatur, Ill., Apr. 16.—With sunshine and clear weather all week, fields dried out to where farmers the past few days have been busy putting in their oats acreage. Some of the oats seeded earlier are up, also some reports of seed rotting in places. Apr. 1st farm stocks of oats were 63,261,000 bushels. As oats seeding is late, farmers are inclined to hold on to the oats they have back in their bins until they see how the crop turns out.—Baldwin Elevator Co.

Weskan, Kan., April 18.—The rains of the last week caused rejoicing here. Some wheat fields look 100 per cent, but not a large acreage sown last fall. Barley is coming fine, best prospect for a crop this year that we have had for five years. Some localities have good top moisture, but no subsoil to speak of. Not a large acreage of barley sown this spring. The whole county will not have a very large crop of wheat and barley, but considering the acreage sown, it looks like there will be a favorable crop.—James A. Weakley.

Minneapolis, Minn., Apr. 16.—The weather warmed up over the past week-end and relieved many sections of the country, particularly the Northwest territory, from the freezing temperatures which had ruled most of last week, and farmers again entered their fields busily engaged with their seeding operations during the first half of this week. Starting Thursday and continuing through to date, a steady, soaking rain fell over the widespread areas of the Northwest farm territory to replenish further the lack of subsoil moisture in many places, and to give the grass and seeds that are already sown a good boost. At present, from a moisture standpoint, the agricultural outlook is quite optimistic in this section of the country.—Archer-Daniels-Midland Co.

Delphos, Kan., Apr. 23.—Wheat and oats were never better. We have a large acreage of wheat, and a normal acreage of oats in this territory, with no land left over for planting corn.—D. E. Wallace, mgr., Delphos Co-operative Ass'n.

Washington, D. C., Apr. 23.—In the United States a winter crop of about 726,000,000 bus. was indicated by the Apr. 1 condition. Average yields on the spring wheat acreage indicated in the March 1 prospective plantings report would produce a spring wheat crop of about 200,000,000 bus. If these indications materialize, the domestic wheat crop would total approximately 925,000,000 bushels. A domestic crop of this size would be about 250,000,000 bus. in excess of the 5-year (1932-36) average domestic disappearance of 670,000,000 bus.—U. S. Dept. of Agriculture.

Chicago, Ill., Apr. 20.—There were reports of excellent rains over night in Oklahoma, Missouri and sections of Kansas. The outlook is for more moisture during the next 46 hours, and, therefore, we must assume that the wheat crop is progressing satisfactorily and normally. The weekly government report confirms our own advice and claims the damage from recent cold weather is apparently not severe. It also states that in the Great Plains section, particularly from Oklahoma, northward, winter wheat is making rapid recovery from the recent setback caused by low temperatures, and additional moisture, particularly in Kansas and Nebraska, has been decidedly beneficial. According to the Texas weekly crop bulletin, the winter wheat is recovering from freezing weather, and only a small percentage will be abandoned and plowed up.—Uhlmann Grain Co.

Chicago, Ill., Apr. 18.—On an extended trip thru the Southwest, found that recent frosts did damage to jointed wheat over wide sections of the Texas Panhandle and to a small extent, in Oklahoma. On many acres south and east of Amarillo wheat was frozen to the ground, but while it is generally believed that around thirty per cent of the crop in the Panhandle has been damaged, hopes are entertained that the undamaged later stools may come through in fair shape, provided good treatment is received from now on. The damage done in Oklahoma, which is mostly in Kingfisher County, is more or less local, being confined to extra early growth. Along with this, there is considerable red rust starting to show up as well as some early indications of black rust. On the other hand, the moisture fall which was fairly general as well as heavy in some of the sections where needed badly throughout the Southwest, is proving to be very beneficial, and while by no means enough to dispose of the dry subsoil situation, it has extended the period of danger from this factor fully ten days nearer the harvest in many places. Nevertheless, more or less of the crop down there will be under suspicion relative to what submoisture shortage may do, as well as to what aftermath of the frosts may or may not come up until closer to harvest time.—H. C. Donovan, of Thomson & McKinnon.

Canada, Kan., Apr. 25.—Acreage on wheat, corn and oats is about normal, with no abandonment so far. Wheat is growing too rank.—Siebert Bros.

Winnipeg, Man., Apr. 19.—Rainfall on the prairies of Canada during the week ending today was confined to light rains and showers. Temperatures fell to rather low levels after a long spell of warm weather. Field work is progressing rapidly and seeding operations are gradually extending from Manitoba and Southern Saskatchewan to the west and north. In general surface moisture conditions are favorable to germination but over large areas of Western Saskatchewan and Eastern Alberta reserves are deficient.—James Richardson & Sons, Ltd.

Waco, Tex., Apr. 24.—Saturday in vicinity of Denton found black rust showing on lower sheath blades in wheat about ready to head out. Agricultural experts say infestation some earlier than usual and that it has a wider front east and west at southern end of east Texas wheat sections than in many years, which they claim to be the breeding spots for most of the black rust that has damaged North American wheat crop in the past. Then today's drive Dallas to McGregor to here I found infestation more pronounced with spores starting on head stem on plants with kernels half formed, but both the progress of the rust and growth of plant has been checked by cooler than usual weather.—H. C. Donovan, statistician Thomson & McKinnon.

Chicago, Ill., April 21.—Winter wheat crop prospect in the United States probably is fully equal to the April 1 indication of 726 million bushels. Freeze injury to the Texas and Oklahoma crop probably has been offset by improvement from additional moisture farther north. Although most of the yield-determining weather for spring wheat is still ahead, the crop is starting with less handicap than last year when 189 million bushels were produced. July 1 domestic carryover probably will be around 200 million bushels. Hence, present probabilities are that the United States will have over 1,100,000,000 bus. of wheat in 1933-39 against 965 million bushels in the present season. Such a supply would be close to the largest on record except in 1931-32. It would provide an export surplus of over 300 million bushels after liberal allowance for domestic consumption and carryover.—Gilbert Gusler, statistician Millers National Federation.

Minneapolis, Minn., Apr. 21.—The Northwest spring wheat states are in much better condition than they have been for several years. Minnesota is especially fortunate, with a good supply of moisture in the soil and ideal growing conditions in practically all sections of the State. Seeding has progressed rapidly and is much earlier than usual. The Northern Red River Valley could use more moisture soon. North Dakota is in good shape compared to the past few years. The eastern third, along the Canadian border, and the northwest area are well supplied at the present time with moisture; central and southwest sections could stand much

## Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for July delivery at the following markets for the past two weeks have been as follows:

	Option		Wheat													
	High	Low	Apr. 13	Apr. 14	Apr. 16	Apr. 18	Apr. 19	Apr. 20	Apr. 21	Apr. 22	Apr. 23	Apr. 25	Apr. 26			
Chicago .....	105½	78¾	79¾	82¼	81¾	82½	82¼	82¼	82	82	81¾	80½	80¾			
Winnipeg .....	122½	97½	113¾	115½	115½	115½	115	115¼	114	112½	112¾	110½	110¾			
Liverpool* .....		95½	100¼	100¾			102½	101¾	103	103¾	102¾	101½	101¾			
Kansas City .....	101½	74½	75¾	78¾	77¾	78½	78½	78¾	78¾	78¾	78	76¾	77			
Minneapolis .....	113½	87½	89¾	91¼	90¾	91¼	90¾	91¼	91¼	91¼	91¾	89¾	89			
Duluth, durum .....	93¼	76¾	78	80¾	79¾	79¾	79¾	79¾	79¾	79¾	78¾	78¾	78¾			
Milwaukee .....	103¾	78¾	79¾	82¼	81¾	82¾	82¾	82¼	82¼	81¾	82	80¾	....			
Chicago .....	66¾	56½	61¾	62	61½	61¾	61¾	61¾	61¾	61¼	61	60½	60¼			
Kansas City .....	60	54¼	57½	58½	58	57¾	57¾	57¾	57¾	57¾	57¾	57¾	57¼			
Milwaukee .....	66	56¾	61½	62	62	61¾	61¾	61¾	61¾	61¾	61	60¾	....			
Chicago .....	32¾	25¼	26½	27¾	27½	28	27¾	27¾	27¾	27¾	28	27¾	27½			
Winnipeg .....	48¼	40½	43	43¼	43	42¾	42¾	42¾	42¾	42¼	42¼	41¾	41¾			
Minneapolis .....	28¾	23½	24¾	25¾	26¾	26¾	26	26	26	25¾	26	25¾	25¼			
Milwaukee .....	31¾	25¼	26¾	27¼	27¾	27¾	27¾	27¾	27¾	27¾	28	27¾	....			
Chicago .....	72¾	57¼	58¾	59¾	60	60¼	60¼	60¾	60	60	60¼	59	59¾			
Minneapolis .....	67¾	52¼	54¾	55¾	56¾	57¾	57	57½	56½	56½	57¾	55¾	55½			
Winnipeg .....	85¾	62¼	63	65¾	64¾	65¾	65¾	66¾	65¾	64¾	64¾	63¾	63¾			
Duluth .....	....	55	56¼	57½	58	59	59	60½	59	59	58½	58½	58			
Minneapolis .....	46	45	....	....	45¾	45¾	45¾	45¾	45¾	45¾	45¾	45¾	45¾			
Winnipeg .....	63¾	54¾	56¾	56¾	57¼	55½	55¼	55½	56¼	56¾	56¾	56¾	56¾			
Chicago .....	106	90½	91½	91¾	92¼	93¼	93½	93¾	93½	92¾	91¾	92	91¾			

\*At daily current rate of exchange.



more moisture but have enough to start the new crop. Altho surface moisture conditions are fair to good, there is still a severe lack of sub-soil moisture, and it will take generous rains to replenish the soil. Seeding is well along except in the northern areas. South Dakota is in fair to good shape except in the central and parts of the northern area, but conditions are very promising. Small grain seeding is nearing completion. Montana prospects are much brighter than they have been for some time. Precipitation has been generous in many of the dry areas, especially the northeast section and along the Canadian border.—T. R. Shaw, editor Cargill Crop Bulletin.

Des Moines, Ia., Apr. 19.—Field work in Iowa was a month ahead of normal by the end of March, when the cold weather of early April interrupted operations. Oats and barley seeding is well advanced in the southern part of the

state. Differences of opinion exist as to the amount of damage done by the prolonged cold spell.—Charles D. Reed, meteorologist.

Winchester, Ind., Apr. 23.—Driving some 600 miles over Indiana we found things in as good a shape as anybody would want. Wheat crop splendid everywhere; didn't see an acre in the 600 miles but what looked like it would produce a fair crop. Plowing is pretty well under way, apparently twice as many tractors in use this year as last plowing for corn and they are turning up a lot of soil, using harrows back of them, leaving the ground in splendid condition. Will be a large acreage of soy beans. Farmers who are signing up to quit raising corn will put their ground in soy beans. Corn planting will be well under way next week if the weather continues good.—P. E. Goodrich, pres. Goodrich Bros. Co.

Springfield, Ill., Apr. 20.—Rainfall was light to moderate, occurring about the 16th and 17th. Weather conditions generally favored crop growth, and field work made better progress central and south where spring work is generally behind. Spring plowing is especially delayed in areas. Progress and condition of winter wheat continues average to excellent. Winter wheat is generally stooling well and in height mostly

ranges from 4 to 8 inches; jointing is reported from Wabash County. Rye generally is a good crop; it is in the jointing stage in Scott County. Oats are approximately 80% sown and one-third up in the north, and about 55% sown and 20% up in the south. Many localities report a slight amount of oats seed rotted in the ground, and a few localities considerable. Meadows and pastures made good improvement.—E. W. Holcomb, U. S. Dept. of Agriculture.

## Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Canada, Kan., Apr. 25.—About 5% to 8% of last year's wheat is still in the farmers' hands, and some of it will not move to market unless the market gets considerably better.—Siebert Bros.

Decatur, Ill., Apr. 23.—Improved condition of country roads resulted in moderate marketings of corn. Some improvement in moisture. Principal demand coming from export outlets.—Baldwin Elevator Co.

Winchester, Ind., Apr. 23.—There is some corn moving, quite a little by trucks to the South and quite a little to the elevators. Still a little wheat trickling in, but it is not of the best quality, 50 lb. to 56 lb. Still some oats in the elevators, but they likewise are very light and not moving readily.—Goodrich Bros. Co., P. E. Goodrich, pres.

New York, N. Y., Apr. 15.—During March the New York market received grain in bus as follows (comparative March, 1937, figures in parentheses): Wheat, 273,700 (280,300); corn, 22,500 (1,276,000); oats, 22,000 (13,200); rye, 3,400 (none); barley, 176,300 (145,000). Shipments were: Wheat, 1,115,000 (1,813,000); corn, 83,000 (none); rye, 177,000 (8,000); barley, 258,000 (none).—Produce Exchange.

Cincinnati, O.—March receipts of grains in bushels, with comparative figures for last year shown in parentheses, were: Wheat, 163,200 (152,000); corn, 145,500 (439,500); oats, 138,000 (220,000); rye, 8,400 (33,600); barley, 1,600 (4,800); grain sorghums, 1,400 (none); buckwheat, 1,400 (none). Shipments were: Wheat, 172,800 (222,400); corn, 190,500 (399,000); oats, 122,000 (88,000); rye, 2,800 (11,200).—Cincinnati Board of Trade.

Fort William, Ont.—Summer grain shipments from the lakehead may total 30,000,000 bus. from the opening of navigation till the harvesting of the 1938 crop. J. A. Speers, general manager for the Lake Shippers Clearance Ass'n, stated April 12. He based his figures on the requirements of previous years. There are approximately 17,540,000 bus. of all grain stocks in store at the lakehead now, while about 2,000,000 bus. are in transit to lakehead elevators. In country interior, private and mill elevators are 17,500,000 bus. Recently farmers have been delivering about 2,000,000 bus. to country elevators, at the rate of about 200,000 per day, and car loadings have proceeded at the rate of about 300,000 bus. per day. Last year shipments for the same period were 42,000,000 bus.

Ottawa, Ont., Apr. 22.—Canadian wheat in store for the week ending April 14 decreased 684,550 bus., compared with the preceding week and decreased 33,943,169 bus. when compared with the corresponding week in 1937. The amount in store was reported as 43,759,732 bus. The stocks include 14,395,543 bus. of durum wheat. Wheat marketings in the prairie provinces for the week ending Apr. 14, amounted to 1,139,422 bus., a decrease of 741 bus. from the preceding week. During the corresponding week a year ago, the receipts were 946,356 bus. Marketings in the three prairie provinces for the thirty-seven weeks from Aug. 1, 1937 to Apr. 14, 1938, compared with the like period in 1937 were as follows: 113,500,451 and 152,997,045 bus. respectively.—R. H. Coats, dominion statistician.

Ruthon, Minn.—A rain-gauge has been installed by the National Atlas Elevator Co. This is one of a number installed at elevators of this company at several points. Managers make daily reports on the amount of rain or snow over the previous 24-hour period.

## Kansas Promises 185,630,000 Bus.

"After a careful check we have arrived at abandonment and a condition indicating a probable crop of 185,630,000 bushels," is the report made Apr. 20 by H. L. Robinson and K. B. Latta of the Robinson Elevator Co., Kansas City, operating a large number of elevators in Kansas, and whose sources of information enable them to issue dependable reports on Kansas crops. According to the government report the Kansas crop in 1935 was only 59,951,000 bus., and the 5-year average for 1928-32 177,431,000 bus.

"At this date the growing plant has seldom looked better than it does at this time. Additional moisture has been added to the topsoil over the entire state and while some apprehension was felt as to possible frost damage our reports are most encouraging altho it is possible some small areas might have some damage which only will be revealed by final yields. Sub-soil moisture has not yet been replenished altho the moisture received has been highly beneficial and there has been little or no run off so that at present there is enough moisture to carry the plant until early May. It must be remembered that timely rains are of utmost importance as the plant has good growth with quite heavy foliage and will use moisture fast with the approach of warm weather.

"Crop diseases can still be a big determining factor in final yields and should moisture not come the outlook can change quickly for the worse, while normal weather could add bushels per acre and make a possible big crop for Kansas."

## Quality of the 1937 Corn Crop

The 1937 corn crop in the principal corn-growing states was of unusually high quality. The market receipts during the period Dec. 1, 1937, thru March 31, 1938, graded much higher than during comparable periods for the 1936 and 1935 crops. Forty-eight per cent of the inspected market receipts of 1937 crop corn graded No. 3 or better with only 15 per cent grading lower than No. 4, as compared with 35 per cent grading No. 3 or better and 18 per cent grading lower than No. 4 for the 1936 crop, and as compared with 29 per cent grading No. 3 or better and 42 per cent grading lower than No. 4 for the three-year average 1934 thru 1936.

Due to the generally well matured character of the 1937 crop, the moisture content of the corn receipts was somewhat below the average for preceding years as indicated by the fact that 48 per cent of the receipts contained not more than 17.5 per cent of moisture—the maximum limit for grade No. 3. "Cracked corn and foreign material" was not a factor of any importance in the grading of the crop. The factor of "total damaged kernels" was one of only minor importance in grading the corn receipts during the period Dec. 1, 1937, thru March 31, 1938.

The Bureau of Agricultural Economics reports the following percentages by grades:

Grade	Yellow			White			Mixed			All Classes		
	Average	1934-5-6	1936	Average	1934-5-6	1936	Average	1934-5-6	1936	Average	1934-5-6	1936
No. 1	2	1	2	1	1	8	1	3	2	2	1	2
No. 2	7	4	14	7	7	10	9	19	15	7	6	13
No. 3	20	26	32	19	39	33	15	24	33	20	28	33
No. 4	30	50	37	25	41	39	25	32	36	29	47	37
No. 5	33	16	13	35	10	8	34	16	11	33	15	13
Sample	8	3	2	13	2	2	16	6	3	9	3	2

## Wheat Acreage Under A.A.A.

State allotments of wheat acreage were announced Apr. 13 by the Agricultural Adjustment Administration. The national allotment is 62,500,000 acres.

Some of the state allotments follow:

Colorado, 1,504,623; Idaho, 1,011,604; Illinois, 2,039,411; Indiana, 1,689,970; Iowa, 456,034; Kansas, 12,519,879; Kentucky, 382,542; Michigan, 765,831; Minnesota, 1,609,218; Missouri, 1,938,358; Montana, 3,973,939; North Dakota, 9,431,355; Ohio, 1,870,407; Oklahoma, 4,291,780; Oregon, 867,859; South Dakota, 3,345,403; Texas, 4,146,240; Virginia, 546,728; Washington, 1,912,506; Wisconsin, 108,001.

The state allotments will be broken down among counties and individual farmers under a formula set up in the farm act. Growers who plant within their allotments will be eligible for benefit payments at the rate of 12 cents a bushel on the normal production of the allotment.

If the growers overplant, they will be subject to deductions from such payments at the rate of 96 cents a bushel.

This year, the A.A.A. said, no deductions will be made for exceeding wheat allotments if co-operating farmers reduce other soil depleting crops so as not to exceed the total soil-depleting allotment for his farm.

## Stocks of Wheat in Interior

Washington, D. C., Apr. 22.—Stocks of wheat in interior mills, elevators and warehouses on Apr. 1 are estimated by the Crop Reporting Board at 73,075,000 bus. Stocks in these positions on Apr. 1, 1937, were 39,009,000 bus. and the 6-year average (1931-36) was 73,820,000 bus. Present stocks are the highest for April 1 since 1934.

Adding wheat stocks in these positions to stocks held on farms shows a total of 197,958,000 bus. on April 1, compared to 110,472,000 bus. on that date last year and the 6-year average of 205,442,000 bushels.

The following table shows comparisons by classes in thousand bushels:

Stocks in Interior Mills, Elevators and Warehouses, Combined with Stocks on Farms Apr. 1.				
Class	1935	1936	1937	1938
Hard red winter	58,863	36,256	80,106	64,215
Soft red winter	43,901	37,309	26,512	51,034
Hard red spring	32,293	39,294	24,903	35,044
Durum	5,071	10,538	6,293	10,759
White	26,738	25,584	22,658	36,906
Total	166,866	148,981	110,472	197,958



## Moisture Needed to Grow Grain

By P. C. POULTON, supt. N. M. Paterson & Co., Ltd., Fort William, before Society of Grain Elevator Superintendents of N. A.

It is with much relief and thankfulness that we are able to feel that the drought cycle is a thing of the past and for the time being at least, is one of those things we need not worry much about.

I feel all interested in the grain trade should have some understanding of the amount of moisture required to produce grain. All of the following deductions are concerned only with conditions of soil and moisture of the three Canadian Western Provinces. The Dominion Government of Canada has had established for more than a quarter of a century, three Experimental Farm Stations located at Brandon, Man., Indian Head, Sask., and Swift Current, Sask. It is of one of the more recent scientific investigations made at one of these stations, namely, Swift Current, that I wish to talk to you about.

Mr. E. S. Hopkins, Field-Husbandman, and the late Mr. S. Barnes conducted investigations on "How Much Moisture Does a Wheat Crop Utilize?" Their findings are astounding.

Under average Western Canadian conditions (which conditions would be comparable to the states of North and South Dakota, Montana, and Wyoming); it takes from 1,000 lbs. of water to 2,600 lbs. of water to produce one pound of wheat, or 30 tons to 80 tons of water to produce one bushel of wheat. This statement intrigued me exceedingly. I again acquainted myself with those school day tables and found that if sufficient moisture fell or was in the soil in the form of subsoil moisture to the extent of 14½ inches of water and using Mr. Hopkins' figure of 2,600 lbs. of water being required to produce 1 lb. of wheat, that 1,265 lbs. of wheat would be produced on one acre of land, or 20 bushels per acre of 63 lbs. to the bushel.

The gentlemen named went further in their investigations than the figures already given and gave the rate of utilization of moisture of growing crops by months, namely: April, .25 inches; May, 1.25 inches; June, 1.65 inches; July, 11.50 inches, or a total of 14.65 inches.

A glance at these figures suggests at once that if a growing crop requires no less than 11½ inches of water in its last month of growth, we must have copious June rains or an equivalent amount of water already in the soil in the form of moisture reserves.

Another quite intriguing finding given out by Mr. Hopkins and the late Mr. S. Barnes states that the roots of the wheat plant penetrate from 5 to 6 feet, which also suggests that if seed be planted in soil deficient in moisture reserves, the roots of the plant will, therefore, exhaust the last vestige of moisture in the soil and still not produce a crop, making it definitely more essential that moisture in bountiful quantities be received before another crop be planted.

I take at this time the liberty to quote in full another finding by these gentlemen from Swift Current, and that is the action of moisture already in the soil: "The belief held quite generally that moisture moves continuously upwards in the soil by capillary action, has been found to be incorrect. On the contrary, it is discovered that the movement of moisture upwards to the surface is so exceedingly slow that it may be considered to all intents and purposes to be negligible."

Also contrary to general opinion, wheat plants do not seem to be injured by hot temperatures or drying winds. It is the lack of moisture, or the drought, that damages the plant. It has been noted that under very adverse conditions of heat and dry winds, crops that are irrigated do not suffer.

Hot dry winds do not "lap-up" moisture from the soil, because the few inches of soil on the top is already dry and moisture which has penetrated below that depth is apparently safe from the action of heat and winds.

We know that 10 inches of snow is equal to 1 inch of water, but it does not follow that subsoil reserves of moisture are built up to the water equivalent of snow falls, because snow usually falls on a frozen surface and that the surface cannot thaw out until all of the snow has disappeared, meaning that the snow water, to a very great extent, runs off into ditches or sloughs or is lost through evaporation.

## Books Received

**SOYBEANS**, the wonder food, by Dr. N. A. Ferri, is a 70-page booklet on health, disease, economics of food, and nutrition from the individual and national standpoints. The soybean represents an almost complete food, declares the author, with unusual and special nutritional qualities superior to any other single source of food. Costing hardly 10% as much as other foods, soybeans contain four or five times as much nutritional value. Published by Modern Health Foundation, Chicago, Ill. Price, 35c.

**THIRTIETH BIENNIAL REPORT** of the Kansas State Board of Agriculture, of which J. C. Mohler is sec'y, covers the activities of this body during 1935 and 1936. Contains general Kansas farm statistics on population, acreage, production, assessed valuation, etc., by counties, including each of the small grains, soybeans, legume seeds, sorghums, and livestock. Goes into great detail in a study of the wild mammals of Kansas. Reviews new developments in farm economics. Published by Kansas State Printing Plant, Topeka.

**STATISTICAL ABSTRACT OF THE UNITED STATES, 1937**, is the 59th issue annually published by the government printing office for the Bureau of Foreign & Domestic Commerce. The U. S. statistics published include figures on area and population; immigration, emigration and naturalization; public lands; climate; national government finances; banking and finance; wholesale, retail, commodity and farm prices; national wealth and income; public roads and motor vehicles; transportation by air, land and water; farms, livestock and farm products; and countless others. Buckram bound, 861 pages. Available from the Superintendent of Documents, Washington, D. C. Price, \$1.50.

"Let me say that the 'scarcity' charge against the new farm act is the worst misrepresentation I ever heard," said Sec'y of Agriculture Henry A. Wallace in the course of recent brief radio address in which he substituted the word "abundance" 12 times. What does law mean?

## Michigan Dealers Beat Truckers

"We are not bothered with itinerant truckers," writes the Batavia Elevator Co., Batavia, Mich., "because we can give our feeders as good a buy in corn or oats as any traveling peddler, and the feeders know they get honest weights."

Then the company's letter gets right down to cases with the real reason that it is not annoyed by itinerant truckers. The letter continues:

"Our grain handling facilities are not of the very latest type, but that doesn't matter so much. We have a hook-up with a mill to which we move the farmers' wheat direct from the farm by means of our two large trucks, and the mill has big scales and fast handling machinery."

"Our trucks are of the latest tractor-trailer design, with an all steel box that has two trap doors in the bottoms and in the sides for quick unloading, and partitions to keep separate the grain purchased from different farmers on the same haul."

"These same trucks are used to haul in oats and corn from northern Ohio or northern Indiana for our feeders. When buying grain in those sections we confine our dealings strictly to the local country elevator, where we may feel sure of honest weights, good quality and fair prices."

Quite obviously the Batavia Elevator Co. (which had just purchased its trucks from the Bronson Grain Co. at the time the accompanying photograph was taken) is performing all of the services that it is possible for a trucker to perform. Then it goes a step farther. It has an established place of business, a concrete grain elevator, with many bins where the grades and kinds of grain can be kept separated, where farm supplies and feedstuffs can be stored, and where the farmer can bring their own grain to be ground by the company's new Blue Streak hammer mill with its Kelly Duplex crusher-feeder, and mixed into completed feed thru the company's one-ton vertical feed mixer.

Country grain elevators in Michigan do not face the same problems as do many elevators in the heavy surplus producing grain states. No comparison can be drawn. But in Michigan the elevators are not bothered with truckers, because they deliver better, more complete service than the truckers can give.

Refiners of corn products in the U. S. ground 5,431,176 bush. of corn in March for products going into domestic use, against 6,218,669 in March last year. The total grind for the first quarter was 16,398,306 bush., against 17,475,138 in the like period of 1937.



The Batavia Elevator Co., Batavia, Mich., promotes its business with a fleet of trucks



# Meet Competition of Irresponsible Peddlers With Modern Trucks

Trucks, as a flexible form of transportation, particularly for short hauls, or small loads, are rapidly pushing back the resistance found in the grain and feed trades. They are becoming more firmly established as an efficient means for moving grain, coal and other merchandise carried by country elevator operators. Grain dealers of the Eastern states have long used trucks to promote their business and those of the West are coming to recognize the great advantage of operating trucks for the collection of farmers' grain and delivering merchandise. Their use extends the trade territory of every live merchant.

In Indiana, Ohio and Michigan few grain elevator operators can be found who do not own at least one truck for making deliveries to their patrons, helping to haul grain to the elevator and interchanging stocks and supplies between nearby elevators.

Prompt deliveries have unquestionably been one of the greatest factors encouraging the use of trucks by the grain and feed merchants, altho high freight rates and increasing minimum carloads have helped to make the use of trucks more advantageous. Observing merchants discovered almost at the beginning of the depression that cash and credit were becoming scarce, a condition that caused grain merchants carrying sidelines to switch their buying to wholesalers able to offer small, mixed lots of the merchandise they needed.

This was the condition that led to the rapid expansion of the Syler & Syler interests at Plymouth, Ind. Originally started as a retail project to buy grain and seed from farmers in the Plymouth trade area, and supply the worthy citizens of the village with coal, Syler & Syler, under the energetic management of Ivan Syler, soon found its trucks carrying wholesale stocks of feeds, feed ingredients, seeds and specialties to neighboring elevators who had discovered that truck load lots, frequently purchased, kept their stocks fresh and their inventories low.

One thing led to another. The Syler fleet of

trucks expanded until the garage under the company's new warehouse was no longer large enough to hold them. Latest among the additions to the fleet is a huge tractor and semi-trailer outfit, using a Ford V-8 134-inch truck chassis as the tractor and a big Edwards trailer that will handle up to 10 and 12 tons. Carrying such large loads has made it profitable to send this unit on hauls of as much as 400 miles on some occasions. This truck is driven by Cecil Day.

There is nothing unusual about this Syler & Syler unit. Similar outfits are owned and operated by Foster-Kendall Co. at Carmel, Ind., to make regular weekly trips over a radius of more than 100 miles around Carmel filling the orders taken by its three active traveling men, usually the day after the salesmen make their calls.

Such a truck is owned by Layer Brothers, at Wakarusa, Ind., for the principal purpose of carrying supplies between its head plant and its other elevators at Pierceton and Claypool. Of course, this big unit gets worked in on hauling needed retail and wholesale supplies from city terminals to the three Layer Brothers plants.

Goodrich Bros. Co. of Winchester, Ind., operate over forty trucks serving their line of elevators and thousands of customers quickly.

The grain, feed and seed business in Michigan is handled almost entirely by truck. From some of the larger points in the southern part of the state grain still moves to terminals by rail, but nearly all Michigan wheat sold to Michigan mills moves from the elevators to the mills by truck. Practically every elevator in the state owns one or more trucks and hauls its purchases from the farms either to its elevator or direct to the mill buyer, the consumer, or the terminal. One big buyer owns a 20-ton tractor, semi-trailer and trailer train to accumulate his supplies and to make deliveries of large lots to distant points.

In Ohio, Michigan and Indiana a great deal

of fertilizer is sold by the elevators, and when trucks are not busy with the grain, feed or seed business they are used to accumulate supplies of fertilizer from factory or warehouse points for quick movement to farms during the fertilizer buying season; or to haul baled straw to the paper mills for manufacture into fibre-board and corrugated board boxes.

The use of trucks by grain dealers has spread so far westward that they may be said to blanket the trade, altho the trade is still a long way from the saturation point in truck use. Every terminal elevator in Sioux City is supplied with truck dumps and hoists as well as carload receiving facilities, to take the grain that moves from nearby points by truck. Out of Kansas City and St. Joseph an almost endless number of privately owned trucks carry stocks of feeds, grains, and feed ingredients to retailers in the trade territory. St. Joseph and Kansas City terminals suitably located have long scales, and wide driveways with truck unloading facilities that will handle the big ones. In Kansas City one terminal buyer moved over a million bushels of wheat by truck to barges for export movement down the Missouri river.

Trucks are now accepted by the grain and feed trades as first essential to trade extension.

**Cornell University** has estimated that a breeding hen requires 230 units of vitamin G per 100 grams of feed.

**Liverpool, Eng.**—Preserved at the Liverpool University is a chicken, the right side of which is a perfect male, the left side a perfect female. Dissection upon the death of the bird demonstrated that internally as well as externally it was half male and half female, and the bird was actually laying, in spite of having only one well developed ovary, for a completely shelled egg was found in the oviduct.

**Omaha, Neb.**—The National Farm Chemurgic Council held its fourth annual conference at the Hotel Fontenelle April 25-27. Soybean meal was a subject discussed by such prominent speakers as E. S. Dyas of Iowa State College, J. W. Hayward and E. E. Roquemore. E. F. "Soybean" Johnson, St. Louis, pres. of the National Soybean Processors Ass'n, looked into the past, and predicted the future for soybean products.



Syler & Syler's Modern Truck picking up a load of oats at Hamlet, Ind., elevator.



# Car Dumper Operation

HARRY THOMS, superintendent Kinnikinic Elevator, Milwaukee, before Society Grain Elevator Superintendents

I am no graduate mechanical engineer with a couple of degrees after my name so I won't dwell on the mechanical details of dumper construction and operation but I do know that our dumper works and has been working for nearly eight years. As I have been in charge of unloading operations during this eight year period, I know a lot about the cost of operation, maintenance expense and general convenience with the many savings that have been experienced and I believe that it is this question of savings in which you would be interested.

Let me say something of our installation at Milwaukee. We have three 15,000-bu. receiving legs, one leg for each row of shovel pits. A car dumper ordinarily requires a 25,000-bu. receiving leg if it is to operate at capacity and it looked for a while as though we were going to have to replace one of our existing legs with a big 25,000-bu. leg, if we were to install a car dumper. But we got around that.

We put the car dumper about 200 ft. down the track from the track shed. The dumper discharges into a 2,400-bu. hopper which feeds onto an inclined 48-in. belt conveyor that takes the grain from the dumper pit and conveys it into the track shed. We have a tripper on this belt which enables us to discharge the belt into any one of three shovel pits. So, while one of our 15,000 bushels legs is elevating one carload, we are emptying the next car into the second pit which of course, has its own elevating leg. Then, we can move the tripper to the third shovel pit and by the time we have delivered a carload to that point, the first pit is empty and we move the tripper back and start all over again.

Thus, our three 15,000 bushel legs give us a total elevating capacity of 45,000 bushels per hour and this is more than the dumper requires. Of course, each carload is completely handled thru one shovel pit, elevator and scale.

We were able to make this installation without disturbing our operations in any way because only the conveyor and tripper had to be installed inside the existing track shed. This system has worked out fully as well as anticipated and we are well satisfied with it.

The question of cost should be considered from two angles, namely that of the owner who wants to amortize the investment and second, that of a lessee who must pay 6% on the investment.

We are lessees, so are not directly concerned with amortization and you will have to get somebody else to explain about that side of it. We do pay our 6% interest and we make money by it.

Our dumper installation including foundations, dumper house, conveyor, tripper, etc., cost around \$60,000 and at 6% that costs us about \$3,600 a year. At say 10,000 cars a year we pay 36c per car interest.

When we are really hitting the ball, averaging nine cars an hour we have four men on the job. One operator and a sweeper take care of the dumper while the other two are kept busy operating the car puller, getting cars to and from the dumper house. At 85c an hour these four men represent a labor item of about \$3.40 an hour. At nine cars an hour it represented a labor item of 38c per car.

So, 36c for interest plus 38c for labor is 74c per car. We think that is pretty good. There is no additional power cost because this power cost is no higher per car for the dumper than for a set of power shovels.

Furthermore, it costs no more per car to maintain a dumper than it does to maintain power shovels. We maintain our car dumper for about 3c per car unloaded. I understand that the manufacturers will agree now to re-

place all working parts indefinitely at a flat rate of about 2c per car unloaded.

There are other savings. Demurrage for instance; we don't know what demurrage is. We can unload 70 cars in an eight hour shift and because any of us can operate the dumper, it is easy to put on two or three eight hour shifts. That would give us more than 200 cars a day and they don't come in any faster than that.

In July of 1931 we ran our dumper for 21 days without stopping except for a few minutes a day to change shifts and give it the grease gun. In these 21 days we took in 4,048 cars over the dumper which averages 8 cars an hour and at an average of 8 cars an hour for those three weeks means we were generally doing better than 10 cars an hour to make up for losses in time beyond our control such as bad order cars, delays on the scale floor, delays due to changing shifts and greasing, switching cars and other inevitable hold-ups. But we got the 4,048 cars unloaded in those 21 days and we kept ahead of demurrage charges.

**Grain Doors.**—We rarely break a board. Only when they are rotten to begin with or when they are put in place by a country shipper who has nothing but railroad spikes to nail them in with. We probably don't break more than one board in 100 cars and that saves good money.

**The labor question.**—It may be said that a dumper puts a lot of men out of work and that's a bad theory in times like these. But if you have ever taken your turn at the handles of a power shovel in a car that has been standing in the summer sun, with the dust clinging to the sweat all over you, not to mention the dust that you breathe in, respirator or not, and a respirator doesn't cover your eyes, wading thru deep grain before that rope pulls tight, trying to keep from getting caught by the rope hour after hour, then you won't blame the dumper for keeping men out of this job.

There are plenty of talks at this convention dealing with safety and working conditions and no superintendent here will argue that a shoveler has a safe, clean job. There is very little that you can do about this condition but a dumper is certainly one answer.

**Properly located dust collectors** in the dumper house will eliminate all objectionable dust. Even without dust collectors, there is usually a draft through the dumper house that takes away the worst of it.

**Plugged Cars Detected.**—When we first put in our dumper we used to get a lot of cars which had damp or otherwise bad grain put on the bottom and we think that some of these shippers figured that we would never see it unloading with a dumper. But we never miss. The dry, heavy grain comes pouring off the top and exposes whatever may be underneath and we find it every time.

**Labor Turnover Solved.**—Our dumper has helped us more here than in any other way. We don't hire and fire shovelers according to the seasonal movements of grain because our regular force with the dumper can handle what comes. We are often thru unloading by 11 o'clock, generally by noon, having handled perhaps 30 or 40 cars. With the unloading out of the way, our men go about their other duties. We don't have unemployed shovelers waiting around for a job with all the red tape of Social Security, Workmen's Compensation, etc., whenever they have to be hired or laid off. Taking on new men is costly business. We used to find that in summer we had to take on and lay off 100 men before we found 3 who were really good.

So not only has our dumper eliminated the

worst job in the elevator, solved our labor turnover problems and speeded up our operations but it has at the same time saved us money.

I have said enough and I can sum it all up in this way: After eight years of automatic unloading, we have a lot of power shovels which you can buy cheap but our dumper is not for sale.

## Washington News

**Investigation of the affairs of the American Cotton Co-operative Ass'n** has been resumed by the Senate. At early hearings it was alleged that the A. C. C. A. had undergraded cotton from \$2.75 to \$3.50 a bale, causing a loss to both the growers and the government.

**Fulmer** has proposed in a House resolution the collection and publication of statistics on a number of crops, including soybeans and flaxseed, by the Census Bureau. Attached would be a penalty for failure of any processing plant to provide the correct information as ordered. The Commerce dept. will also try to collect the same information.

## Refund of Processing Taxes

Consignors of products exported prior to Jan. 6, 1936, are entitled to a refund of the processing tax applicable thereto, the Supreme Court of the United States having refused to review a decision of the circuit court so holding.

It remains to be seen whether the Bureau of Internal Revenue will recede from its position that refund is denied under Sec. 601 (b) of the Revenue Act of 1936. This decision was in the case of Cudahy Bros.

The 1933 law provided for the refund of such taxes to the consignor, but Sec. 601 (b) of the 1936 Act provides that no refund shall be made to the processor. In allowing the refund in the Cudahy case, the Court pointed out in its decision that where the processor and consignor are one and the same person, the refund to the taxpayer as consignor is not prohibited and was intended by Congress to be made.

## Nebraska Board Pares Feed Truck Rates

Lincoln, Neb.—A truck feed rate dispute between truckers, Omaha feed manufacturers, the Gooch Milling Co., Lincoln; Crete Mills, Crete, and Black Brothers of Beatrice, was aired before the Nebraska Railway Commission. While the latter three firms appeared satisfied with the present truck rate structure, of 100% for loads of 9,000, 150% for 4,000, and 175% for 2,000 lbs., other sought establishment of the minimum rate for the one ton loads. The present structure creates difficulty for truckers who haul livestock into Omaha and want to haul small loads of feed back on return trips.

The Nebraska Railway Commission has announced a sharp reduction in common motor carrier rates on prepared feed moving from mills direct to farms, as a consequence of these hearings. The cut in rates becomes effective May 1.

Using the 100 pound rates on 9,000 pound volumes as a basis, the Commission effected reductions as follows:

Minimum weight of 4,000 pounds from 150 to 120% of the 9,000 pound volume; minimum weight of 2,000 pounds from 175% to 130%; and minimum weight of 1,000 pounds from fourth class to 140% of the 9,000 pound volume.

The same schedule, the Commission said, will apply as minimum tariffs for contract carriers.

**Wheat crop insurance** regulations, instructions and application forms will be in the hands of the county com'ites some time in June. Between May 2 and 25 the administration will hold 17 sessions of two days each to explain and instruct, in states west of Pennsylvania.



# Maintenance of Forgotten Structures

By J. W. THOMPSON, Chicago, before Society of Grain Elevator Superintendents.

A concrete grain elevator may stand 10 or 15 years before any consideration is given to the fact that disintegration and crumbling are causing serious damage. At the end of this time, these buildings merit the name of "Forgotten Structures." The older the building, the more rapid the deterioration generally becomes.

Typical indications that disintegration is occurring consist of small and large cracks throughout the surface area, soft seams, surface spalling, honeycombs, exposed steel and natural wear. The causes of this disintegration are well known. Access of moisture to unprotected surfaces of this kind causes alternate freezing and thawing, and because of this continued action over a period of years, the variation in expansion and contraction causes the formation of small and large cracks. Mortar falls away from bricks, concrete sloughs away and stucco crumbles. Moisture getting into these cracks then causes corrosion of the steel framework, and it is not long before the elevator owner is confronted with the familiar condition known as "cancer." This cancerous condition is a progressive formation of corrosion on steel parts, with the eventual disintegration of the concrete surface inevitable.

**Carelessness in construction** is another one of the common causes for early exposure of a steel framework to corrosion influences. If properly constructed, the steel framework of an elevator or other building will be protected with a three inch layer of concrete. However, too many times the pouring of this concrete is taken for granted.

**Improperly mixed concrete** contains a large proportion of aggregates. These aggregates become more familiar to us when we describe them as small or large balls of improperly mixed materials. These get behind the steel framework and bulge or push it out nearer to the surface of the concrete covering so that in many cases instead of having a three inch protective layer, we have a one inch layer. Needless to say, this thin layer is insufficient.

Pouring concrete seems like a relatively simple operation, but when poured in sections the operation is always accompanied by the formation of a scum or pulpy gelatinous fluid which forms on top of this poured section. When the next section is poured directly on this, the bond between these two sections is very poor and always results in a seam that is soft and subject to very early disintegration. The experienced operator will always cut this seam away by thorough wire brushing so that the succeeding concrete pours can bond thoroughly to the previously poured section.

**In repairing concrete**, large cracks are cut out to remove the disintegrated portions of the surfaces. These cuts should be made at right angles or nearly so and the cut-outs then filled with the non-shrinking cement into which a certain amount of iron oxide has been incorporated, depending on the size of the patch. The soft seam caused by the improper pouring of concrete must be dealt with in the same way.

When dealing with small cracks, the choice of a proper mastic cement controls the ultimate success of this operation. Only experience can dictate what this cement should be.

**Spalling**, probably more familiarly known as "sloughing off" or "scaling away," of concrete surfaces may either be due to corrosion of the steel frame or the improper pouring of the concrete. Corroded steel that has appeared on the surface must either be cut out entirely or the concrete must be removed behind it so

that it may be put back into position after which the proper three inch protection of concrete can be applied.

These facts all serve to show that "protecting the surfaces of what is now the "forgotten structure" would not only have resulted in an enduring good appearance, but it would have made unnecessary the expense of major repairs.

Avoiding these costly repairs simply means that after an exterior concrete surface has properly aged for approximately ten months it should be coated with a properly designed water proofing paint. If this is not done and major repairs become necessary, protecting the patched areas and preventing further disintegration become important problems which can only be solved by water proofing.

Concrete chimneys, storage bins, elevators, bridges, abutments, are but a few of the surfaces upon which a waterproofing system can be used to advantage.

**The ideal water proofing system** is one which keeps moisture out, but permits moisture to pass slowly from the inside outward.

The concrete surface which has normally aged for 10 months can be waterproofed for approximately 6 cts. per square foot because no extensive repairs are required. The concrete surface that has stood approximately ten years requires extensive repairs and the cost of waterproofing is therefore around 10 cents per square foot, 4 c. of which covers the repair cost and the remainder representing the cost of painting. The structure that has stood 25 to 30 years without proper attention requires more extensive repairs and the approximate cost of waterproofing is 18 cts. per square foot, 12 cts. of which covers the cost of repairs.

**Decorative Value.**—In addition to the economy of waterproofing the exterior of an elevator, there is also the decorative value of painting these exterior surfaces.

**Safety.**—We come now to a few of the miscellaneous uses of paint as they pertain to safety. Chiefly thru color, attention of the employee is immediately attracted to those surfaces or those objects in whose vicinity caution should be exercised. Such uses of paint are generally referred to as "eye openers to danger."

The American Standards Ass'n has been advocating the use of various color schemes for the quick and positive identification of pipelines. To be of greater assistance to individuals or firms to whom this idea would appeal, a permanent organization has been established and it is only necessary to communicate with the National Safety Council at 108 East Ohio Street, Chicago, or The American Society of Mechanical Engineers at 29 West 39th Street, New York City. Each industry has a color scheme for pipe lines characteristically its own. It is the ultimate goal of the American Standards Ass'n that each industry in time to come will be standardized in such a color scheme so that regardless of whose plant it be or wherever it be located, the set-up will be identical.

For precautionary measures, the banding of a belt with vivid stripes of yellow at spaced intervals will tend to attract attention when the belt is moving. Thus the employee is warned before attempting to cross over it and the resulting accidents attributed to this cause will be diminished or even eliminated.

It is well to so finish the manlift in such a manner as to attract the attention of the employee to the proper locations to reach for his hold.

**Static electricity** is an ever lurking hazard

and no precaution taken is too costly to reduce or eliminate this danger. Therefore the painting of machinery wherever such unit has any tendency to develop static electricity with metallic base paints is wise. A ground will be provided to a great degree.

**Moving machinery** and especially electrical equipment offers a hazard at all times regardless of safety devices that may now be in use. Were such dangerous locations outlined by painting the floor area with bright colors, the attention of the employee is immediately attracted regardless of where his thoughts may be at the time.

Out on the track shed, provide the necessary illumination to the steps. Also use a little vivid color to show the clearance of a car.

**Fire apparatus** such as extinguishers, sand pails, empty pails, etc., have long been finished with a red. Have you ever noticed how dingy these objects become after a period of time? Do you suppose in your own plant there could be any possibility of any employee not knowing the location of these devices? Do you suppose this same employee, if there be one, might have passed these objects time and again without having had his attention attracted to them merely because the color background did not command his attention? A movement is afoot to break loose from this age old, dead, red idea. It can be brightened up. This suggestion is offered for your consideration:

On columns, paint the area behind the extinguisher and around the column with five 6-inch wide stripes of orange and red, beginning with orange and following alternately with red and orange.

On the walls, again use five alternating stripes of orange and red to form a panel behind the extinguisher of a size approximately 18x30 inches. Here again the stripes should be about 6 inches wide, beginning with orange and following alternately with red and orange.

One of the best safeguards you have is the advice of a reputable paint manufacturer. Next be certain that a competent workman is entrusted with your maintenance painting. This along with your own knowledge and supervision should result in a better control of maintenance which will over a period of years return your company a handsome dividend in the form of reduced replacement and repair costs.

**Loan plans** to farmers in five states of the dust bowl for planting were announced Apr. 11 by the Department of Agriculture.

## Rails Ruined by Political Interference

Hardware men in convention at Memphis were told by Samuel O. Dunn that: "In the first two months of 1938 the net operating income of railways was 80 per cent less than in the first two months of 1933. Why?"

"Operating expenses were \$95,000,000 larger. Of this increase \$62,000,000, or 65 per cent, was caused by an advance of 27 per cent in average compensation per employee, in accordance with the government's general policy of exerting pressure for higher wages. It has been claimed that advancing wages in industry and transportation would promote recovery. It plainly has not done so; and it is helping bankrupt the railroads and destroy their employing and buying power. All economic experience shows prosperity should and does increase wages, but that largely to increase wages during a depression is one of the best ways to protract it.

"Altho their net return was 80 per cent less, the taxes of the railways in the first two months of 1938 were 30 per cent, or \$13,100,000, more than in the first two months of 1933. Everybody knows the reasons for that. Upon what principle of economics or common sense does government by some policies so greatly reduce the net earnings of an industry, and at the same time by other policies so increase its taxes?"



## Driveway Observations

BY TRAVELER

WHEN JACK COCHRANE and August Raimer razed the old retail seed and feed store of T. H. Cochrane Co. last winter, they replaced it with a modern 35x40 ft. structure with great plate glass show windows, and PLENTY of private parking space around the building.

The automobile continues to make its influence felt in retail circles. The difficulty of finding adequate parking space keeps many a customer from stopping at the store to pick up some little item that he needs, and often switches trade from one store to another. People are interested in their own convenience.

The problem becomes slightly involved for the retailer. He never quite knows whether he would be best off by maintaining a store in the congested districts where he knows trade exists, or whether he might improve his income by opening a store in a more open district, providing plenty of private parking space, and depend solely upon automobile owners for his trade.

Grain elevators, never thought to be in the best retail locations, but usually having plenty of parking space, are finding their retail business more and more profitable.

\* \* \*

COMING to realize that about 10% of the seeding of small grain is lost annually, 5% thru preventable smuts, and 5% thru scab, root rots and other diseases, the Traer Farmers Elevator Co., Traer, Ia., responded to a demand from its customers for seed treating service. It installed a machine for treating small seed grain with mercury and copper dusts for protection against this preventable loss.

Seed treatment not only prevents the loss, but insures better germination, reducing the seed requirements per acre, in most cases suf-

ficient to balance the cost of treatment. The gain in yield thus becomes a profit for the farmers. And a profit for the elevator, for elevators must depend upon volume of business to show any gains above expenses.

\* \* \*

"ALUMINUM PAINT goes much farther than ordinary paint," responded H. F. Raabe, manager of the elevator department of the Eagle Roller Mill Co., New Ulm, Minn., to an inquiry. "In the first place one coat of aluminum paint is usually sufficient, whereas with ordinary paint you must use at least two coats to make a satisfactory job.

"We know of tests that were made with cheap aluminum paint costing from \$2 to \$2.50 per gallon and compared with good aluminum paint costing over \$4 per gallon. We have found that painting with the best aluminum paint is cheaper than painting with the low priced paint."

## Meat Retailer Loses Claim for Processing Taxes

The United States Supreme Court on Apr. 25 refused the claim of Abe Cohen, Louisville, Ky., meat retailer, who sought to recover processing taxes allegedly paid to Swift & Co., Chicago meat packers, under the original Agricultural Adjustment Act. The refusal was accomplished by refusal to pass upon a ruling of the Seventh Circuit Court of Appeals, which affirmed dismissal of Cohen's complaint on the ground that there was no cause of action, because retailers did not pay the processing tax, they only passed it on to their customers.

Cohen's complaint contended that he and other retailers of meats paid a total of \$43,981,677 in processing taxes to Swift & Co., these being included in the prices paid for meat products, and that after the Agricultural Adjustment Act was declared unconstitutional the packers recovered \$8,708,999.

## Up-to-date Montana Feed Plant

For the manufacture of commercial feeds the Occident Elevator Division of Russell-Miller Milling Co. has recently completed at Billings, Mont., a plant complete in itself, separate from the feed mill doing local custom mixing and grinding, and supplying their elevators and trade with feeds in Montana and Wyoming.

The new feed plant includes mill building, hay grinding plant, warehouses and storage elevator.

The mill, having railroad trackage on both sides to take in raw materials and load out finished products, is 48 x 37 ft. on the ground, with full basement and three floors, 40 ft. to the eaves, covered with 26 gauge galvanized standing seam roofing and cedar lap siding finished with aluminum paint.

FEED MILL.—The full basement under the feed mill plant provides room for a Jacobson Universal No. 5 Hammer Mill, two triple action Strong-Scott Feed Mixers of 2,500 lbs. capacity each, a concrete molasses storage tank with 2-carload capacity, and a Strong-Scott No. 5 molasses pump attached with V-belt drive from 10-h.p. motor. The molasses tank is fitted with steam heating coils to maintain proper temperature.

The main floor of the building, 37 x 48 ft., provides space for a Strong-Scott Molasses Mixer unit, a pellet mill, a Strong-Scott Pellet Cooler and an Invincible Automatic Packer. Located on this floor is a moving 6-beam Fairbanks Hopper Scale mounted on wheels and track to which feed may be drawn from 12 ground material and concentrate bins, and from which in turn the material is dropped to the feed mixers located on the floor below.

The 12 ground material bins are fitted with special steel hoppers and combination of gates which allow the material to be drawn out without plugging the bins and also into the hopper scale in the exact quantity desired. All sacking



Occident Elevator Co.'s New Elevator at Billings, Mont.  
[See facing page]



is done on this floor. Sacking spouts are provided from three scratch feed bins and four bins located under a corn cracker to draw off the various separations from this unit.

In addition to the pneumatic system direct connected to the feed mill, 3 stands of elevators provide means of re-elevation of the various materials. Above the molasses mixing unit is a special steel bin designed to draw with a continuous flow into the molasses machine. Ahead of the pellet mill 3 steel bins

by gravity thru the scalpers to the various bins below. The material from the main cyclone is distributed thru a series of special built valves thru steel spouting to the 12 ground material bins.

THE STORAGE ELEVATOR built in connection has a capacity of 26,000 bus., is cribbed to a height of 45 ft. with 5 ft. of center cribbing, and is divided into 16 bins, the outside being finished the same as the feed mill.

The elevator is equipped with a Strong-Scott

Elevator by E. C. Janke. The plant was designed and built by the Hogenson Construction Co., which also at the same time modernized the existing buildings and installed a 30-ton, 40 x 10 ft. Fairbanks outside truck scale.

## Waterway Movement of Grain Increases

Waterway and truck movement of wheat is increasing in the Southwest, declared Fred W. Lake, vice-pres. of Continental Grain Co., Kansas City, speaking before the Grain Market Analysts Club in Chicago recently.

Lower rates are the reason, he explained. Water rates from Kansas City to New Orleans are a third lower than rail rates, which causes a very large percentage of the export wheat to move by barge. This lower rate enables elevator operators using barges to absorb some trucking charges. One elevator operator of his acquaintance, said Mr. Lake, has moved nearly a million bushels of wheat by truck at a 5c discount.

Mr. Lake exhibited a bundle of new wheat from Texas which he said was damaged 100% by frost. C. M. Galvin of James E. Bennett & Co. commented that a recent trip thru Kansas and Oklahoma showed wheat to be in an advanced stage of growth. Mrs. E. H. Miller, crop statistician, commented that the probable damage to Southwestern wheat from the frosts could not be estimated until growing weather marked the effects, and that the actual amount of deterioration would not be fully apparent until harvest. Wheat, severely damaged by frost, she explained, may continue to grow, but the heads would not fill.

True efficiency concerns itself with raising quality rather than lowering prices.

Indiana corn loans by the government cover 974,498 bus. on farms at an average of 48 cents per bu.



This Occident building is equipped with a hay conveyor and piping to collector; Bagging Spouts and Reel to take meal out of Alfalfa.

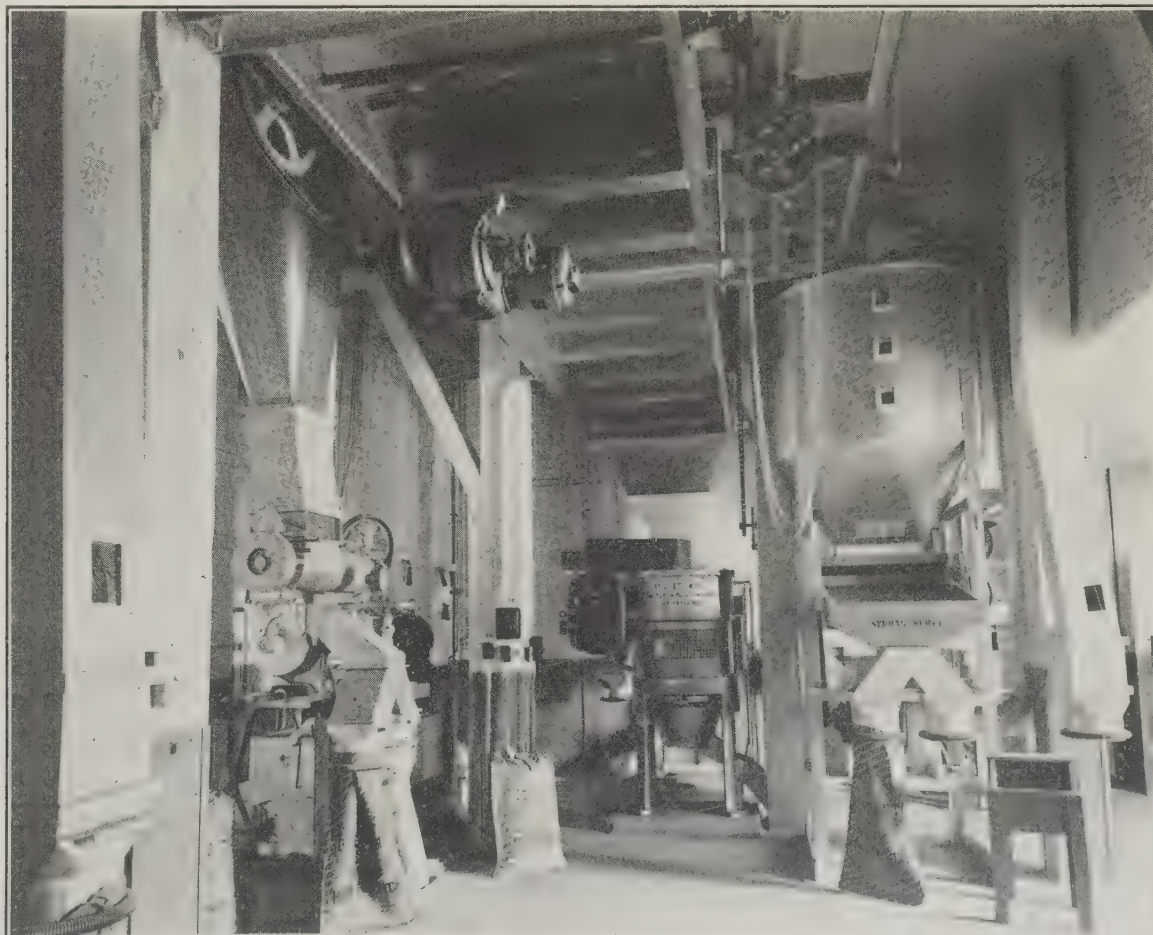
with a capacity of 24-hour continuous operation are provided. Latest modern equipment provides uniform delivery and mixture of mixed material to pellet machine.

On the third floor is a garner bin above a corn cracker and grader unit, which bin is fed directly from the head of the elevator. The corn cracker delivers the graded material to the 4 bins mentioned. On this floor also are 2 Strong-Scott 10 ft. Reel Scalpers and 1 Strong-Scott Scalping Shoe placed and spouted so that material flows from the elevator legs

Power Shovel, one leg driven by Strong-Scott Head Drive, Fairbanks-Morse totally enclosed motor and circular distributor. A 500-bu. Howe Hopper Scale with special steel hopper is provided for weighing in the grain. A T-type work floor provides space for an oat huller, an oat crimper, an oat steamer and a No. 5 Eureka Cleaner.

Warehouse attached to mill is 48' x 123'.

An exterior view and several interiors of this up-to-date plant are reproduced in the engravings herewith. It is managed for the Occident



Variable Speed Feeder for feeding ingredients from the maturing bins to the pellet mill, also Strong-Scott Molasses Feed Mixer. (Center) Pellet Mill, and (Right) Pellet Cooler.



# Grain Cleaning

By H. L. HEINRICKSON, superintendent Terminal Grain Corp., Sioux City, before Society of Grain Elevator Superintendents.

All of us who are associated with the grain industry try to keep abreast of the times so as to be familiar with the modern methods of cleaning, grading, and processing in use today. However, the territory represented by those attending this convention nearly extends thruout the length and breadth of this continent, and obviously the conditions and problems confronting this group in the marketing of grain must vary considerably. We, as a group, should have much to gain in talking over many of our specific grain processing problems.

What is common practice to some may be just the information needed by others.

The present complex requirements of the modern terminal elevator for the handling and processing of grain were not necessities to the ancients. Our Egyptian friends had a simple way of cleaning grain. They threw the grain into the air and let Mr. Wind do all the work. In those days grain mixtures and weed seed contamination were little known, but in a later era Nature began to make it more difficult for man properly to prepare his grain for food. Weed seeds became more of a factor and as the demand for cleaner grain increased, man resorted to his wits for the development of mechanical means for cleaning.

About 2,000 years ago hand sieves made of horsehair were used by the Gauls who then tilled the soils of what is now France. From then until 1775 little improvement seems to have taken place. A man named Gooch, then living in England, invented a machine in which he combined artificial wind by means of the rotating fan, and the shaking riddle of ancient Gaul. After that the development of this type of equipment made greater progress. It is interesting to note that one of the early patents on a fanning mill in the United States was taken out in about 1829.

The first indented cylinder machine was patented about 1880—a little over 50 years ago. It was used to remove cockle from wheat and was therefore known as the cockle cylinder. It seems peculiar that this early indented cylinder was not improved upon or extended in its possible field of service for nearly 40 years after its introduction.

The last 25 years have seen greater improvement in the construction and refinement of grain cleaning and grading machines than in any period of history. As we look back over the past few years we can see that our grain cleaning and grading requirements have become more complex year by year and as usual man's ingenuity has come to the rescue of the industry.

**Separating Wheat Varieties.**—If it were not for the score or more varieties of hard spring wheat now being grown throughout the spring wheat belt of the United States and Canada, our problem would be confined to the removal of dockage. Many of these spring wheats have radically different milling and baking qualities and when mixed with any of the ten varieties of durum wheats grown in the same territory, the mixtures present a serious problem for the market. Here again "necessity becomes the mother of invention." The pocketed disc and the improved indented cylinder can, when there is ever so slight a difference in size, by length or width, separate one variety of wheat from another. Many different pockets have been developed to meet exacting requirements of separations, extending thruout a wide range, from the smallest grass seed up to the coarsest grain.

Separations by length, by width and by air are the three fundamental principles employed in our modern grain cleaning machin-

ery. They are far different looking machines than those in common use 25 years ago. At first they consisted of a special machine designed to meet a specific need and were not always adaptable for other problems of separation. Little by little they were improved and adapted for more general use until today with one of these modern general purpose grain separators, the terminal elevator man can scalp, aspirate, clean and grade wheat, rye, barley, oats, soy beans and corn without change of mechanical equipment. They have surprisingly good capacity, occupy small floor space and require little power.

The general drouth thruout the Northwest during the past few years, created unusual conditions which challenged the ingenuity of the best grain men and engineers of the country. Nearly all small grain that could be harvested at all, contained a very high percentage of light shrunken kernels. The problem was how to analyze that grain as it came to market, and determine what portion of the thin kernels should be separated out so as to improve the market value of the portion salvaged. There was little difference in weight and size of the kernels to be salvaged and those to be rejected. Most of the grain cleaning machines which had been used for years to remove thin grain proved either too wasteful of good grain, or when adjusted or modified to accomplish the desired accuracy, were very low in capacity.

**Grading by Width of Kernel.**—These conditions created a demand for a general purpose grain grader. That is a machine which could grade any of the small grains by width of kernel and do it accurately at good capacity. Many of the old forms of graders were improved and many new types have been tried with more or less success. It is hard to predict which type will survive, but there is little doubt that we, in the grain trade, now have a new tool with which to process the grain of the future. It is for us, and those who process grain into the many forms of food products, to learn how to use this new tool, the "Width Grader," most efficiently.

**Weed seed dockage** in the grain has not been a serious problem during these drouth years. During the rapid expansion of grain production in America, new fields of virgin soil were continually being added as farm land. There were few weed seeds in these fields and for a number of years the grain sent to market contained so small a percentage of weed seed that cleaning grain for weed seed removal was an easy task and could be done at high capacity.

During the past 40 years, considerable attention has been given the contamination of our grain fields by agriculturists. They have found that many farm lands in the spring wheat territories contain over 100 different species of weed seeds and that to-day in many of these fields, one square foot of soil 5" deep may contain over 4,000 weed seeds. Check-ups have shown that these fields contain over 180,000,000 weed seeds per acre. Wheat is sown at the rate of slightly less than 1,000,000 kernels per acre. The ratio of weed seeds in the soil to wheat planted may be about 180 to 1.

In 1902 an Agricultural Experiment Station of Virginia began a test to determine how long weed seeds could be buried in the soil at plowing depth and yet grow when brought near enough to surface for proper germination. They found that after 20 years, at least 50% of the original seeds would still grow. It is evident that weed seed contamination of grain will still be with us when favorable weather conditions for their propa-

gation returns. Some of the winter wheat areas of the south and the irrigated grain territories of the west have recently been troubled with weed seed dockage in their grain. Each year finds some new weed specie harvested with the grain.

With the modern grain cleaner, the removal of most weed seed dockage, with low grain shrinkage, is not a serious undertaking. Some mixtures require special machines and careful attention in order to prepare that grain for particular food products. It is difficult to discuss cleaning without mentioning cleaners and types of cleaners. I have mentioned the indent types which make as many as five complete separations in one operation.

Then we have the shaker types. I know that there are a great many of these machines in use today, which still do a fair job, but could be improved by the installation of a Buhler drive.

These new drives eliminate practically all vibration. They intensify the screen action, producing a smooth lateral motion which creates a closer and more exacting separation,

[Concluded on page 349]

## Kewanee MODEL 38 OVERHEAD Truck Lift PRICE \$275.00 F. O. B. KEWANEE



*Tire Hooks instead of Cradle if specified.*

Designed by Kewanee Engineers, from many years' experience in designing truck handling equipment, nothing is left to chance. A Kewanee Overhead Lift will raise a truck 5 feet in 30 seconds... surely and smoothly. The entire lift is practically fool-proof and indestructible.

Special features include ball bearing motor; Spiral Winding Drums; large diameter Shafts; 1/2" Cable. The automatic brake keeps the cable from unwinding too far when the cradle is lowered.

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# Grain and Feed Trade News

Reports of new elevators, feed mills, improvements; changes in firms; fires, casualties, accidents and deaths are solicited.

## ARKANSAS

Helena, Ark.—The remains of the New South Mill's main building, destroyed by fire in February, are being torn down and construction of a new cottonseed oil mill is expected to get under way in a short time according to Don M. Weir, manager.

## CALIFORNIA

Santa Rosa, Cal.—Louis Reine is planning to manufacture a new health cereal.

Los Angeles, Cal.—Roy W. Reeves' assets, consisting of animal food concentrates, office equipment and automobile, all valued at \$1,726, were offered for sale Apr. 21 by Wm. H. Moore, Jr., trustee in bankruptcy.

Vernon, Cal.—The Huffine Grain Co. mill and storage plant was destroyed by fire of undetermined cause April 16, with a loss estimated by E. A. Huffine, sec'y, at \$65,000. Of this amount \$50,000 was in three buildings, burned to the ground, and milling machinery, and \$15,000 for 600 tons of feed and grain stored in the plant.

Roseville, Cal.—A new industry which plans to use waste products from the Livoti plant here, for the manufacture of feed concentrates and a building plastic, has purchased property adjoining the Standard Oil Co. plant and expect to have the construction of the buildings under way shortly. Owners and operators of the venture are F. D. Pifer and Dr. Orvil L. Kirkle.

## CANADA

Walkerton, Ont.—A. R. Weber is manager of the Walkerton Flour Mills, recently bot by William Knechtel & Sons, Ltd., Hanover, Ont.

Medicine Hat, Alta.—Damage estimated at \$50,000 was caused by a fire that broke out early April 19 in the warehouse of the Maple Leaf Milling Co.

Fort William, Ont.—As a result of a strike for recognition of the Canadian Seamen's Union, members of the crew of the steamer Mantadoc, of the Paterson Steamships, not including officers, were on a sit-down strike April 16 in the galley of the ship. As a result of the strike the vessel was unable to leave the harbor for Duluth for grain.

New Westminster, B. C.—Installation of four more new-type grain loading spouts at the Searle Elevator is under way, reports the New Westminster Harbor Board, which installed one on trial six months ago. Two of the new spouts are being put in now, the other two will be installed later in the summer. The improved Metcalfe spouts will enable the elevator to load ships at any stage of the tide.

## COLORADO

Vona, Colo.—The Snell Grain Co. recently reported windstorm damages.

Denver, Col.—The Farmers Grain & Bean Ass'n. has succeeded the Colorado Bean Growers Ass'n.—C. R. M.

Severance, Col.—Burglars forced open the cash drawer in W. B. Gress' elevator recently, stripping it of about \$7 in small change.

Denver, Col.—Clyde E. Williams has resigned as general manager of the Colorado Milling & Elevator Co., of Denver. His retirement followed an illness of several months' duration during which time he took a lengthy vacation. Upon his return he was requested to resume his duties here with the company, but chose to continue in semi-retirement. He has since recovered his health and plans to re-enter business.

## ILLINOIS

Columbia, Ill.—Recent windstorm damaged the Columbia Farmers Co-op. Grain Co. property.

Altona, Ill.—The Kroll Milling Co. has installed a 15-ton Howe Motor Truck Scale.

Fountain Green, Ill.—Elmer Bouseman is installing a 20-ton Howe Motor Truck Scale.

Pittsfield, Ill.—M. D. King Milling Co. sustained property damages in a recent windstorm.

Arlington Heights, Ill.—John Henricks has installed a Howe 15-Ton, 22x9 Motor Truck Scale.

Danforth, Ill.—The Farmers Elevator has installed a Howe weightograph on its motor truck scale.

Lake City, Ill.—Improvements are being made at the F. W. DeHart elevator, among them a dump for trucks.

Elburn, Ill.—Elburn Co-op. Co. recently completed remodeling its office building. Frank Reynolds is manager.

Maple Park, Ill.—A. H. Wittry is installing in his new elevator a Howe Heavy-Duty 20-Ton Motor Truck Scale with Recording Beam.

Wise Road, (Maroa, p. o.), Ill.—Mail addressed to L. J. Kaiser Co. at Wise Road, has been returned by the post office marked "moved."

McNabb, Ill.—The McNabb Grain Co. has purchased a 20-ton heavy duty Howe Motor Truck Scale for installation at its new elevator.

Cullom, Ill.—Lewis E. Magee is erecting a building, 45x20 ft. for a grinding mill and feed store, to be installed by Cletus S. Casper, Cullom grocer.

Wenona, Ill.—A local meeting of grain dealers of the Streator-Wenona territory has been scheduled for the Stanton hotel here, Apr. 28, at 6:30 p. m.

Creston, Ill.—The Creston Grain Co. elevator, owned by Ed Farley, of Leland, which was destroyed recently by fire, will be rebuilt. George Saathoff has been given the contract for its reconstruction.

Danville, Ill.—Hotel Wolford is waiting to receive your room reservation for the annual convention of the Illinois Grain Dealers Ass'n. All your friends will be there to enjoy the excellent program now scheduled for May 12 and 13.

Morris, Ill.—Erection of an 80,000 bu. terminal elevator to cost \$40,000 is in prospect here, backed by the recently organized Co-operative Allied Grain Dealers Ass'n. This group represents elevators in towns within a radius of 35 miles of Morris, which now have no waterway outlets. The operation of the terminal will be on a co-operative basis, all of the elevators sharing in the cost of its building and operation. The move will permit them to take advantage of the low rates for shipment of grain by water and thus enable them to pay their farm customers more for their grain. Morris was chosen as the most central river point from which to ship the grain from this wide area. The Farmers Elvtr. Co. of Reddick; Farmers Co-operative Elvtr. Co. of Dwight; R. A. McClelland, operating an elevator at Dwight; Verona Farmers Elvtr.; Farmers Elvtr. of Yorkville; Plainfield Grain Co.; Westbrook Grain Co. of Millington; Minooka Grain, Lumber & Supply Co.; Herscher Grain Co.; J. M. Bookwalter Grain Co. of Coal City; Mazon Farmers Elvtr. Co. of Mazon; C. J. Luther of Wilmington; Treasurer Grain Co., Gardner; M. T. Welsh Grain Co., Langham; Dunn Bros., Kinsman, and Farmers Square Deal Co. of Morris are the companies who have joined in organizing the Cooperative Allied Grain Dealers. Other elevators in this area are also interested and are expected to join in the use of the terminal facilities provided, with a prospective annual business being transacted here of 5,000,000 bus. of grain.

Manlius, Ill.—The Farmers Elvtr. Co. has installed a Howe Weightograph.

Loda, Ill.—Videll of Gilman and H. E. Morgan of the Buckley Grain Co. made a trip thru eastern Illinois and western Indiana last week end to look over the wheat and other crops and do a little fishing. Videll did say the new oats seeding was coming along about as fast as the rowing blisters.—Chas. Gingerich, Loda Farmers Grain Co.

Peoria, Ill.—Suit has been brot by Charles H. Albers, receiver for the Roanoke State Bank, seeking recovery of \$80,000 of the bank's funds. The sum, it is alleged, was lost by the late Benjamin R. Belsley, pres. of the bank, in speculation. Defendants named were partners in the Lamson Bros. & Co. and Barbara and Kathryn Belsley, joint executrixes of their brother's estate.

## CHICAGO NOTES

Memberships in the Board of Trade were selling at \$3,150. The membership of Sartell Prentice in the Chicago Board of Trade has been sold.

The Board of Trade directors fixed the rate of interest for the month of April, 1938, under the provisions of Rule 352, at 5 per cent per annum.

Rice Elvtr. Co. has been incorporated; 250 shares p. v. common, at \$100 per share. To own and operate warehouses, elevators and granaries for storage of grain in bulk, etc. Incorporators: D. F. Rice, W. Rowley, J. J. Rice.

By a vote of 427 to 143, members of the Board of Trade April 14 defeated a proposed amendment to rule 291 of the organization's by-laws, which would have made the unit of trading in soy beans 1,000 bus. instead of the present 5,000 bus.

Benjamin F. Sterling, a member of the Board of Trade since 1925, was declared ineligible for reinstatement by directors of the exchange Apr. 12. He was deemed guilty of irregularities or unbusinesslike dealings by vote of the directors and his membership will be disposed of by the board.

Geo. L. Stebbins considers himself lucky that the fire which destroyed his barn, garage and windmill on his 5-acre place at Palos Park recently did only \$400 damage to the residence, the wind blowing the flames away. One car was burned. The loss was \$6,000, \$1,000 on contents; partly insured.

Richard F. Uhlmann, sec'y of the Uhlmann Grain Co., recently tendered his resignation as pres. of the Board of Trade Clearing Corp. His retirement as president of the clearing corporation automatically eliminates him as a member of the business conduct com'te of the Chicago Board of Trade. No reason was given for the action.

Speculative buying of wheat futures at Chicago continues at a low ebb, the favorable reports on the growing crop in the winter wheat area operating against an advance in prices during April. The May delivery sank to 80¢ Apr. 26, which is the lowest price in four years. The open interest in Chicago wheat futures which was 102,147,000 bus. a year ago and 86,790,000 a month ago, has decreased to a low of 83,109,000 bus. Apr. 6 and 83,311,000 bus. Apr. 23.

The Chicago Board of Trade Safe Deposit Co., owner of the Board of Trade building, operated at a loss of \$158,104 in 1937, according to the annual statement recently issued. A loss of \$295,790 was incurred in the preceding year. The Board of Trade made rental payments to the corporation totaling \$934,576, including a prepayment of \$100,000 on first mortgage bonds, compared with \$865,354 in the preceding year. Rental income from other tenants amounted to \$934,576, against \$916,128 in 1936. The safe deposit company showed a deficit of \$1,304,351 in its surplus account at the end of 1937.



Capt. William A. de Courcy O'Grady, 48, connected with the purchasing department of the Quaker Oats Co., died suddenly at his Glencoe home of a heart attack April 15. Mr. O'Grady served as a captain in the Canadian army during the world war and was wounded and made a prisoner by the Germans. Funeral services were held April 18.

Morris R. Glaser was elected president of the Grain Market Analysts Club Apr. 12 at the concluding meeting of the season. He takes the place held this year by Royal W. Bell. Mr. Glaser was formerly vice-pres. George H. Tanner was elected vice-pres. for the coming year. Stewart A. McNabb, Mark W. Pickell, Harry B. Godfrey and Raymond A. Gerstenberg were named to the board of directors.

The Chicago Board of Trade Clearing Corp. has increased sharply its margin requirements from members on large lines of wheat, corn and oats. The new schedule calls for 4c per bu. on a net open interest in wheat up to 5,000,000 bus., 6c on the next 1,000,000, 8c on the next 1,000,000, and 10c on all over 7,000,000 bus. Margin requirements on a net open interest in corn in excess of 7,000,000 bus. have also been raised to 10c per bu.

Harris, Upham & Co. will take over the accounts of A. O. Slaughter & Co., on May 1, when the latter firm retires from business. Thru this consolidation Kingman Douglass of the Slaughter firm joins the Harris, Upham concern as a limited partner, while Reginald O. Dunhill, Raymond F. McNally and Wallace C. Winter, with the entire production staff of the Slaughter company, will be associated with Harris, Upham & Co.

On April 12, 1938, the directors of the Board of Trade approved the following ruling of the Rules Committee: "When a member commission merchant goes out of business, or closes one or more offices, or withdraws ordinary facilities for transacting business from one or more offices, (1) The customers of such offices may transfer their open trades to any other commission merchant without paying a commission for such transfer. (See Regulation 1809-A). (2) The commission house receiving such transferred account will collect the full commission when each open trade is closed."

Elected to membership in the Board of Trade recently were William T. Husband, associated with R. C. Bacon of Boston; James C. Martin, Miami, Fla.; William M. Schwartz, a partner of Gerstenberg & Co., Chicago; Alfred Bodtker, Volkart Bros. Clearing Co., New York City; Joseph H. Dimon, Jr., Columbus, Ga.; Nelson A. Emmertz, Chicago; Harry Shere, Minneapolis, Minn.; Elmer A. Milligan, Jefferson, Ia., a partner in the firm of D. Milligan & Co.; George C. Omerly, Jr., Wyncote, Pa., and James A. Kidson. The latter is a son of Ross H. Kidson and is one of the third generation of families who have been prominently identified with the Board of Trade.

## INDIANA

Ockley, Ind.—The Ockley Grain Co. elevator has been sold to a Mr. Surch.—S. A. M.

Goldsmith, Ind.—The local G. G. Davis Elevator has installed a new feed mixer.—L.

Sharpesville, Ind.—The Sharpesville Grain Co. has installed a new feed mixer and made other improvements.—L.

Westfield, Ind.—The property of the Kendall-Goodrich Co. was slightly damaged by fire of unknown cause on April 3.

Bremen, Ind.—Lester Long has leased the Stauffer Grain Co. elevator here.

Portland, Ind.—The Cartwright & Headington's elevator has been purchased by the D. F. Teeple Trucking Co., Decatur, Ind.

Columbia City, Ind.—Columbia Grain Co. has recently installed a No. 15½ Kelly Duplex Corn Cracker and Grader with motor drive.

Kokomo, Ind.—On April 4 a farmer in driving into the Morrison & Thompson Co.'s elevator tore off two doors of the elevator building.

Teegarden, Ind.—The Teegarden Dairy Corporation has purchased the Wolf & Bowser elevator from C. G. Wolf of North Liberty.

Crete, Ind.—The Bowen Elvtr. Co. suffered a \$100 loss to thieves, who carried off a new typewriter and some merchandise on Apr. 20.—Leif.

Pinola (Laporte, R. F. D. 2), Ind.—The Pinola Co-operative Co. has built a new warehouse 24x60 ft. to be used for storage and mixing feeds.—Leif.

Valparaiso, Ind.—The Valparaiso Feed Store, owned by Elden Kuehl, has been remodeled and equipped with scale, drag and elevator legs among other improvements.—Leif.

South Whitley, Ind.—O. E. Hull, pres. of the Northeastern Indiana Hay & Grain Dealers Ass'n, is recovering from a sinus operation recently undergone in Ft. Wayne.

Windfall, Ind.—Mitchell Partnership recently installed a single expeller soy bean mill. The company also plans to prepare mixed feeds and supplementary feeds by next summer.

Waterloo, Ind.—R. C. Fretz sold his feed and hatchery business to Waterloo Farmers Equity Exchange; Mr. Fretz will continue as pres. and manager of the new corporation.—Leif.

Atlanta, Ind.—G. G. Davis has replaced his feed mixer with a new Kelly Duplex machine. The new mixer is of one-ton capacity, with floor level feed and with motor drive.

Claypool, Ind.—Arthur Mathews, Union City, Mich., is now manager of Laver Bros. elevator, succeeding M. L. Brown. Mr. Brown will continue with Laver Bros. at the Wakarusa plant.—L.

Albion, Ind.—The Noble County Farm Bureau Co-operative Ass'n tore down the old feed mill and is building a new mill. New power, hammer mill and other equipment will be added.—Leif.

Cynthiana, Ind.—The Charles Nunn & Sons Milling Co. is operating its new mill, recently opened here. The new plant is electrically driven with 60,000-bu. capacity wheat elevator and 6,000-bu. capacity corn crib.

Demotte, Ind.—Paul Black, who suffered serious injury last fall when he fell a distance of 25 feet while operating the manlift in the Al Konovsky elevator, is now able to be out; he is getting around with a cane.—Leif.

Evansville, Ind.—Joseph Carlton Dodds, for many years supervisor and grain buyer for Igleheart, Inc., here, died recently after a short illness. Mr. Dodds came to Igleheart's eighteen years ago from 25 years of service with A. Waller & Co., Henderson, Ky.—W. B. C.

New Albany, Ind.—The grain elevator formerly owned by the Shine Milling Co. is being torn down. The elevator was abandoned several years ago because the 4-inch side of its grain bins started to bulge thru years of constant use. Its foundation was further damaged by the 1937 flood. It towers 90 ft. into the air and is 24x36 ft. at its base. It is now the property of the Schulz Coal Co.

Cyclone (Frankfort R. F. D.), Ind.—I wish to correct a statement previously made to the effect it had been reported the Stevenson Grain Co. was no longer in business. This was misinformation, for I have recently learned that Mr. Brown, a partner in the firm, died the latter part of January and there will be some adjustment of the partnership of the firm in order to settle his estate.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

Romney, Ind.—Negotiations are under way for sale of the Simison Elevator here to W. R. Owens and his brother-in-law, Dr. J. E. Derbyshire, of Van Buren. Mr. Owens is scheduled to take full charge of the business, and expects to remodel the office and make some repairs to the elevator. He will continue his grain brokerage business at Lafayette, under his own name operating the Romney property as Romney Grain Co.

Bluffton, Ind.—Francis Clore Feed & Supply has purchased a Sidney Boot Sheller, Scalper, Crusher, Ajax Hammer Mill and Sidney Mixer.

## INDIANAPOLIS LETTER

W. D. Myers, formerly elevator superintendent in Chicago for the Cleveland Grain Co., is now in charge of the company's Indianapolis elevator. H. G. Broomfield, who formerly held the position, has been put on the company's retired list on a pension.—Ed K. Shepperd, manager, The Cleveland Grain Co.

The Federal Crop Insurance Corp. has announced its schedule of state meetings which will begin the first of next month. These will be two-day sessions, on the first of which will be given an explanation of the program itself and the second day will be taken up with a course of instructions for those who will handle the insurance programs in the various counties of the state. The meeting for Indiana will be held at Purdue on May 4 and 5.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

A ruling upholding the constitutionality of the new Indiana truck weight tax law was made by Judge Joseph A. Emmott of Shelby County Circuit Court on April 7. This was the case filed by the Richmond Baking Co. against the State of Indiana, contending the weight tax law was unconstitutional. Counsel for the plaintiff following the decision indicated they would probably appeal the decision to the Indiana Supreme Court. Doubtless the state police will soon be checking up on the weight license plates, so members should be governed accordingly in the event licenses have not already been purchased.—Fred K. Sale, sec'y Indiana Grain Dealers Ass'n.

## IOWA

Adair, Ia.—H. J. Kuhl, who has been assistant manager of the elevator in Adair the last year, has been appointed manager for the coming year.

Elkport, Ia.—Jaster Mill recently installed a new mixer, attrition mill, corn sheller, corn crusher and pneumatic system for moving ground feed.

Superior, Ia.—Safes at the J. E. Greig and Superior Co-op. Elvtr. Co. elevators were robbed recently, but the robbers found little of value for their efforts.

Crystal Lake, Ia.—Mrs. Beulah Grubb, wife of Harry Grubb, manager of the Crystal Farmers Ass'n, died suddenly from a heart attack, April 2.—L. A. G.

Mason City, Ia.—Northwestern Distributing Co. recently rebuilt and installed new equipment in its mixing department. The plant was badly damaged by fire last December.

Waukee, Ia.—Howard Dallam of Waukee, who recently lost his grain elevator by fire, has purchased the Van Meter, Ia., elevator and is taking it down to move to Waukee.—L. A. G.

Des Moines, Ia.—Every live grain merchant will come to the capital city next Sunday for the annual meeting of Western Grain Dealers Ass'n which promises much of real interest to alert elevator operators.

Chariton, Ia.—Harry B. Stewart, 70, prominent grain, feed, and lumber man here, and one time member of the Chicago Board of Trade, passed away of pneumonia, in the Mercy Hospital, Des Moines, Apr. 18.

Knoxville, Ia.—Garrett Ver Steeg, 68, employed at the Farmer's Co-operative Exchange elevator, narrowly escaped fatal injury when he was knocked unconscious from the runway by a grain spout loading the car during switching operations. His grandson, Melvin de Ruth, pulled him from under the moving wheels and averted more serious injuries. Ver Steeg suffered head, neck and back injuries which will keep him confined for some time.—L. A. G.

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Urbana, Ia.—Earl Reid, feed plant owner, has bot a two-story brick building to house his business.

Walcott, Ia.—The Farmers Mutual Elvtr. Co. has started work on an addition to its warehouse which will connect the office and warehouse.

Greenfield, Ia.—William Scholes, 86, died at his home in San Bernardino, Cal. He and his twin brother, Walter, built the first grain elevator in Greenfield in 1878.—L. A. G.

Le Mars, Ia.—Christopher Lancaster, 62, former resident, died at Mitchell, S. D., following illness of several weeks from cerebral hemorrhage with which he was stricken while on duty as employe of Mitchell Grain & Coal Co.—L. A. G.

Spencer, Ia.—The Lacy Grain Elevator has been moved from Cleghorn to the H. O. Green farm, east of Spencer. The elevator is 24x78 ft. and 60 ft. high and weighs 260 tons. It was moved in two sections. H. W. Goodrich had the contract.

Indianola, Ia.—The E. H. Felton & Co. are celebrating their 11th year in business here. Recently a large pair of scales was installed for custom weighing at the elevator. Glendal Felton is manager of the elevator. The company manufactures the Blue Belt feeds.

Ruthven, Ia.—The new elevator of the Farmers Co-operative Elvtr. Co. with a capacity of 30,000 bus. has been completed at a total cost of \$33,000. This includes the new feed mill building recently opened for operation. Fred Grange is manager of the co-operative.

Newell, Ia.—Frank O. Hocum, of Newell, a former elevator owner, has announced his candidacy for the Republican party for the office of Representative in the State Legislature from Buena Vista county. Mr. Hocum was at one time manager of the Farmers Elevator at Gilman and Pomeroy, later starting in business for himself at Fonda. He sold his Fonda elevator in 1916 and purchased the elevator at Newell, which he operated until the first of last March when he sold the business to H. L. Danielson of Gowrie, Ia.

## KANSAS

Cherryvale, Kan.—Cherryvale Grain Co. on April 7 sustained windstorm damages.

Garfield, Kan.—The Garfield Co-op. Ass'n is wrecking the old "Prather" Elevator.—C. R. M.

Columbus, Kan. — The Stauffer-Cammack Grain Co. reported windstorm damages received Mar. 30.

Reager, (Oronoke, p. o.), Kan.—G. W. Scott, of Delvale, has leased the local farmers elevator.—C. R. M.

Leavenworth, Kan.—The mill plant of the J. C. Lysle Milling Co. was slightly damaged by exposure fire on March 28.

Delphos, Kan. — Wendell Wilkins is tearing down his old elevator and replacing it with a modern, up-to-the-minute structure on the same site.

Blue Rapids, Kan.—The mill, elevator and other buildings of the Blue Rapids Milling & Elvtr. Co. are being given a new coat of white paint.

Wakeeney, Kan.—Pat Gardner has been made manager of the Wheat Pool Elevator recently purchased by the Farmers Union Jobbing Ass'n of Kansas.

Augusta, Kan.—A foundation and basement for an elevator have been built by the Wallingford Grain Co. The elevator is being moved in sections from Ellsworth for reconstruction on this foundation.

Wheeler, Kan.—Thieves recently entered the Morrison and the Equity elevators, taking an adding machine, two fire extinguishers and a grease gun from the former, an adding machine from the latter.

Hutchinson, Kan.—Country elevators included in the sale of Walter C. Fuller's Southwest Grain Co. interests to Roy Miller, former manager of the Salina Terminal Elevator here, include Hugoton, Wolf, Jetmore, Hanston, Ellinwood and Geneseo.

Salina, Kan.—Mrs. Jennie Robinson, wife of C. E. Robinson, prominent Salina miller and line elevator operator, and mother of Harry L. Robinson, prominent Kansas City line elevator and terminal operator, passed away at her home here Apr. 21, age 67.

Delphos, Kan.—We are installing a new 10-bu. Richardson Automatic Scale in our elevator.—D. E. Wallace, mgr., Delphos Co-operative Ass'n.

Burns, Kan.—The Burns Farmers Co-op. Union has taken over the local J. M. Lilley & Co. elevator, which has not been in use for some time. Work started immediately in remodeling the interior of the plant. H. A. Bender is manager of the Farmers Union.

Council Grove, Kan.—John Powell is the new manager of the Hammer Grain & Coal Co., filling the place left by the resignation of Don Houston, who purchased the Fisher Feed Store. Mr. Powell was manager of the Fame Farmers Union at Burdick for several years.

Peabody, Kan.—New scales are being installed at the Peabody Flour Mill Co. The scales have a 15-ton capacity and are 24 ft. long. Manager Poe says they will be available for use of truckers who have loads too heavy for ordinary scales as well as for use of the mill in the coming harvest. The north wall of the office will be remodeled to give a clear view from within of the scale.

Plymouth, Kan.—Neil D. McCallum, for the past 14 years connected with the Kansas Flour Mills Corp. of Cottonwood Falls, and five men of this vicinity have purchased the elevator owned and operated by John Collins for the past 14 years. Mr. McCallum will be in charge of the elevator, which its new owners expect to have in operation in time to take care of the 1938 wheat season.

Dennis, Kan.—Fire destroyed the plant of the Dennis Co-operative Ass'n Apr. 10. George W. Heit, manager, estimated the loss at \$10,000, covered by insurance. Manager Heit stated there was not a large amount of grain on hand, but a big item of loss was a carload of farm implements which had not been assembled and burned in the packing cases in which they had been received. The fire was discovered by Mr. Heit, who saw the flames shooting from the top of the elevator from his home a block distant. Dennis having no fire fighting equipment, very little could be done to check the fire. Mr. Heit stated he could not say definitely if the elevator and warehouse would be rebuilt altho he believed it should be.

## KENTUCKY

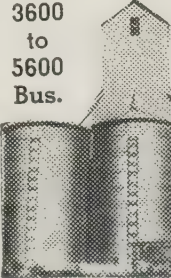
Herndon, Ky.—Carl Futrell recently purchased a No. 1 one-half-ton capacity Kelly Duplex Vertical Feed Mixer with motor drive.

Stanford, Ky.—The Baughman Milling Co. sustained damage to electrical equipment on March 29 due to an electrical storm.

Milton, Ky.—The Milton flour mill is being cleaned and put in readiness for operation. At first custom grinding of feed and meal will be considered, flour to be milled later. R. K. Johnson of Hyden is in charge.

Hartford, Ky.—Fire destroyed the Ward & Tichenor mill Apr. 12, the result of kerosene igniting from a blow torch used preparatory to starting the engine in the basement. The mill was constructed last summer. The loss was placed by the owners and operators at \$2,000. The building and machinery were only partially covered by insurance. Considerable feed, seed and other contents of the mill were also destroyed.

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5600  
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Will answer your surplus storage problems. Suitable for railroad spurs where no storage facilities are available. 3,600 Bu. to 5,600 Bu. size. Provides low storage cost. Easy to set up or take down. Also Grain Bins 500 to 2,250 bushel capacity.

Write for literature giving capacity needed, etc.

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## MICHIGAN

Port Hope, Mich.—Bad Axe Grain Co. reported windstorm damage sustained recently.

Sandusky, Mich.—Michigan Bean Co. has installed a Nickel Hammer Mill feeder ahead of its grinder.

Tustin, Mich.—McClintick & Co. recently sustained slight damage to its property from fire of unknown cause.

Millington, Mich.—The Millington Feed & Coal Co. has installed a Nickel Two-Roll Crusher-Feeder ahead of its hammer mills for mixed ear corn and small grain.

Lansing, Mich.—H. E. Chatterton, for years one of the "biggest bean men" in Michigan, now located at Basin, Wyo., recently suffered two paralytic strokes, and is reported in a serious condition.

Owendale, Mich.—John Gettel, Frank Draschil, Rudolph Wissner and Edmund Good have been appointed as a com'te to solicit stockholders in a further step looking toward the erection of a new farmers' elevator here.

Mulliken, Mich.—The Lewis Cool Elvtr. Co. has installed a 30-h.p. Blue Streak Hammer Mill. It is fed with a Nickel No. 22 two-roll crusher-feeder driven by a 5-h.p. motor. The crusher is equipped with variable flow control and feeds both ear corn and small grain.

Imlay City, Mich.—The Imlay City Farm Buro Elvtr. has installed a 50-h.p. 1,800 r.p.m. hammer mill that is fed by a one-roll crusher driven from the mill shaft. The crusher delivers to both sides of the grinding chamber, each of the down spouts being equipped with permanent magnets for tramp metal protection.

Dowagiac, Mich.—George E. Melvin, 74-year-old superintendent of the Colby Milling Co., failed to return from a trip to Chicago when expected Apr. 19, and had not been found up to the succeeding Saturday, when Michigan state police and Illinois authorities were asked to conduct a search for him. Melvin is founder and a former pres. of the National Ass'n of Operative Millers.

## MINNESOTA

Delano, Minn.—A new building is being planned for the Adickes Milling Co. in Delano.

Sauk Rapids, Minn.—William H. Adams of Mora has purchased the Perski Grain Elevator here and will conduct the business in the future.

Lanesboro, Minn.—Lloyd Sorum, Olaf Norby and Leo Hager have purchased a feed mixer which will be installed in the Lanesboro Grain Co. plant.

Minneapolis, Minn.—Fire slightly damaged the Upton Milling Co. recently. The blaze was confined to the hopper where grain is fed into the elevator.

Duluth, Minn.—T. F. McCarthy, pres. of the Duluth Board of Trade, and W. R. McCarthy, pres. of the Capitol Elevator, recently returned from Florida.—F. G. C.

Minneapolis, Minn.—Fire slightly damaged the Cargill Elevator T at Thirty-sixth Street and Dight Avenue. The fire started high in the elevator near a cupola.

Danvers, Minn.—New roofs were put on recently for the Farmers Elvtr. Co. here. No. 26 gauge standing seam roofing was used. The T. E. Ibberson Co. did the work.

Duluth, Minn.—Work on razing old elevator "B" of the Consolidated Elvtr. Co., started over a year ago, is near completion. Elevator "C" of the same company was wrecked last year.—F. G. C.

Duluth, Minn.—Transfer of the Duluth Board of Trade membership of J. A. Sim, pres. of the Standard Milling Co., to W. C. Engel, Chicago, Ill., vice-pres. of the company, has just been completed.—F. G. C.

Albert Lea, Minn.—The Food Products elevator, which burned April 9, will be rebuilt. Over 5,000 bus. of rye were burned as well as several thousand bus. of other grains. Machinery represented much of the loss, estimated at \$250,000. John Peterson is general manager of the company.

Montgomery, Minn.—The Commander Elevator Co. will open the grain elevator at the local mill in the near future. Alterations have been made at the local elevator for the handling of all kinds of grain. A complete line of all kinds of feed will be stocked together with Commander flour.



Moorehead, Minn.—The Farmers Elevtr. Co. recently installed new feed mill equipment and a new bin was added. Ibberson Co. did the work.

Balaton, Minn.—Paul W. Giese, 67, died April 3 at his home in Balaton. In 1894 he came to Balaton where he was employed by various elevator companies. In 1918 he purchased the Eagle Roller Mill Co. elevator in Balaton, which he operated until his death.

Ruthon, Minn.—Halvore Homme has started on his new duties as manager of the National Atlas Elevtr. Co. elevator. H. H. Schrader, the former manager, resigned from his position recently. Mr. Homme comes here from Truman where he was manager of an elevator for the last two years.

Garvin, Minn.—The Garvin Co-operative Elevtr. Co. recently installed a new 20-ton, 26 ft. Howe Scale and a Strong-Scott Air Dump in the driveway of the grain elevator. The 10-ton Howe Scale and Winter Dump that they had in the elevator driveway was moved and reset in the feed mill driveway for receiving grain to the feed mill. A new leg will be installed in the elevator to be used in connection with cleaning grain and seed. The T. E. Ibberson Co. have the contract for the work.

Granite Falls, Minn.—Western Minnesota grain dealers met 200 strong here Apr. 12, at a gathering sponsored by the Western Grain Dealers Ass'n., sectional organization of grain dealers of western Minnesota, and eastern South Dakota. Subjects on the program were means for controlling trucks, landlord liens, and the new rate situation growing out of the general increase granted carriers, which has established 1c or more differential between towns that formerly were only ½c apart.

Minneapolis, Minn.—Fire destroyed the 55 year old 13-story terminal Pillsbury elevator of the Andrews Grain Co., early April 21 in one of the most spectacular blazes in the city's history. An explosion occurred that blew out a side of the elevator and sent grain spouting aloft, raining down a minute later like hail over a radius of several blocks around. Twelve firemen narrowly escaped being trapped on the top floor when a sudden burst of flame drove them to a fire escape. Some were forced to swing out to drain pipes and slide down the side of the building. The main building of the group burned was built in 1883, of frame, iron-clad construction and contained 150 large wooden bins, ready tinder for the flames. Rapidly the fire spread from this structure to other buildings of the Andrews plant. A power plant containing valuable machinery and a two story storage building were saved. The loss will run between \$350,000 and \$500,000 it was said, with coverage insurance up to \$409,500. Coverage on the grain stored there was \$325,000. About half a million bus. of grain burned. The plant contained 160,000 bus. of wheat and 220,000 bus. of malting barley. The total capacity of the elevator was about 800,000 bus. Origin of the fire, which was discovered by a watchman when he went to the 13th floor to close windows, has not been determined, but a boy who was hunting pigeon eggs late the previous day on the roof of the elevator was questioned by fire department headquarters. He denied using matches. A second youth, who was with him, was also questioned. The boys had been ordered from the plant when their presence was discovered.

## MISSOURI

Kansas City, Mo.—Open house was held by Nutrena Mills, Inc., Apr. 23, to celebrate completion of its new office quarters, across the street from its Kansas City mill. Lunch and refreshments were served in the new two-story structure.

Kansas City, Mo.—Arthur J. Fitz, 56, former office manager for Goffe & Carkner, Inc., passed away recently at the home of a sister in San Diego, Cal., where he was attempting to recuperate from an illness. Surviving are the widow, a son, and two daughters.

Kansas City, Mo.—Members of the Kansas City Board of Trade voted favorably April 18 on an amendment to exchange rules prohibiting trading in grain futures during the last seven business days of a deliverable month, effective after May 31. The change was adopted to make exchange rules conform to a similar order issued Feb. 17 by the Commodity Exchange Administration.

St. Louis, Mo.—B. C. Christopher & Co., of Kansas City, has opened a branch office here.

Carrollton, Mo.—The B. F. Knipschild & Bro. elevator at the Wabash has been sold to the Hart-Bartlett-Sturtevant Grain Co. of Kansas City, who are now in charge of the plant. The elevator was built two years ago by Knipschild Bros. and was managed by Alfred Knipschild. The new owners will continue the business at the present location.

Foristell, Mo.—The Farmers Elevtr. Co. of Wright City bot the Producers Grain Co., taking charge Mar. 15. The deal included the building, fixtures and contents and in the future the elevator will be known as the Foristell branch of the Farmers Elevtr. Co. The building is to be remodeled, plans made calling for at least three times its present floor space. The new company will be stocked with a complete line of feeds, grains and flour. H. H. Koopman is manager.

St. Louis, Mo.—Michael J. Connor, 87, the oldest member of the St. Louis Merchants Exchange, died Apr. 9, following a month's illness. The deceased was head of the M. J. Connor & Sons, grain brokers, and was at the exchange daily. He was the only surviving member of the exchange who marched from the old exchange building to the present new structure on Dec. 21, 1875. Mr. Connor was an active member for 64 years. He entered the grain brokerage business with his brother, the late P. T. Connor, changing the name of the firm to M. J. Connor & Sons following the brother's death. His two sons are William M. and Francis A. Connor, who, with a daughter, survive him.

## MONTANA

Sweetgrass, Mont.—Lyle Gordon of Lethbridge is the new agent for the Ellison Milling & Elevtr. Co. here, succeeding H. H. Smith.

## NEBRASKA

Valentine, Neb.—William Abraham has started a popcorn factory here.

Raymond, Neb.—Harry Tolhurst, a former Elmwood man, has recently been made manager of the Farmers Co-op. Grain Co.

Ruskin, Neb.—Otto Endorf has been chosen as the new manager for the Fuller Grain Co. and is now in charge of the plant.

Union, Neb.—Elmer Withrow, Jr., who has been assisting with work at the elevator with his father, has been ill with the measles.

Union, Neb.—George A. Stites has built a new platform for the wagon and truck scales at the grain office of the George A. Stites Elevator.

Exeter, Neb.—The Exeter Elevtr. Co. has amended its articles of incorporation and changed its name to Exeter Co-op. Elevtr. Co.

David City, Neb.—The elevator owned by O. M. Blevins was damaged by fire March 27. Loss to the building was placed at \$6,000 and to contents, \$200, with partial insurance. Sparks from a railroad engine were responsible for the blaze.

Pierce, Neb.—Frank Littell, 60, well-known grain man, dropped dead recently in the office of the Farmers Grain Co. He had formerly been manager for the grain company for several years, but recently had been working only occasionally.

Elm Creek, Neb.—The Western Alfalfa Milling Products Co. alfalfa mill is being re-fitted with new machinery. New wheels are being put on the barges, the cars and tractors tuned up, the harvesters overhauled and the hammer mills may be replaced, according to Roy Ulrich, who is doing the work. Roy and Henry Hermen will be operators and Weaver Northrup the mechanic. Jud Salisbury will be the manager.

Pierce, Neb.—The Farmers Grain Co. has remodeled its office, cutting a wide arch-way between the front grain office, where the weighing is done, and the show room to display its line of paints, oils and varnishes. Large windows have been put in the show room for display purposes. The manager's private office and directors' room has been enlarged and refinished in natural wood.

**CONDITIONS** abroad "mussy"  
 —a few nations bent on  
 war—some still at each other's  
 throats—all busted and  
 bankrupt—taxes bleeding  
 their peoples "to the bone".  
 At home:—not so good—  
 things "mixey"—too many  
 muddlers—ship scuttlers—and  
 spendthrifts—both high up and  
 low—lack of straight think-  
 ing—cross currents wobbling  
 the Ship of State. She'll right  
 herself—sometime. Democ-  
 racy is not doomed—but—  
 you'll fight for it if you keep it.  
**LOWELL HOIT & CO.**

Osceola, Neb.—Carl E. Cederburg has been made manager of the Farmers Grain Co. elevator, succeeding Melvin Pearson. He is pres. of the fifth district Farmers Union and of the Polk County Farmers Union.

Clay Center, Neb.—The contract for the new Clay Center Grain Co. elevator has been awarded to Ned Cramer. The new structure will be of cribbed construction, with 25,000-bu. capacity. The old elevator now being torn down had only 10,000-bu. capacity.

Omaha, Neb.—The West-Central Co-operative Grain Co. has filed articles of incorporation for handling, storing and marketing grain. Incorporators are: The Farmers Grain Co., Bellwood; Farmers Elevator Co., Chappell; Kimball County Grain Co-operative, Kimball; Farmers Union Co-operative Co., Venango, and Utica Farmers Grain Co., Utica.

Brayton, Neb.—The \$1,350 grain contract suit of John Carlson, farmer living north of Atlantic, Ia., against the Atlantic Mill & Elevtr. Co., et. al, and the intervenor, Ella Goeken, involving the storage of 1,432 bus. of corn in the Brayton elevator and an alleged contract with the elevator company for the purchase at \$1.10 per bu. less storage, was heard in the Cass County district court, April 18. It went to the jury April 19.

Omaha, Neb.—J. C. Hansen, formerly manager of the Farmers Union Grain Co., which was owned by the Nebraska Farmers Union, has given up that position to join the consignment department of the Nebraska-Iowa Grain Co. His new connection becomes effective May 2. M. L. Robb, formerly manager of the Farmers Union Co-operative Ass'n at Fairfield, Neb., replaces Mr. Hansen as manager of the Farmers Union Grain Co.

## NEW ENGLAND

Rutland, Vt.—Cargill Grain Co.'s Buffalo office is reported to have renewed its lease on the local elevator, managed by Henry Larson.

Milford, N. H.—The Farmers Feed & Supply Co. has purchased the D. Whiting & Sons grain business here, and branches at Wilton and Hillsboro.

St. Albans, Vt.—E. W. Bailey & Co., wholesale grain dealers, with mills in Montpelier and Swanton, have purchased from T. J. McGovern of Cambridge, the Farmers Feed & Grain Co. store here. The grain business will be conducted as usual with the same staff and with Howard Rugg as manager.



Portland, Me.—The grain storage bill has passed the Senate and so is on its way to enactment into law. The act as passed increases the time that grain may be held in storage in this port from 10 months to three years. This will make possible the shipping grain thru the port of Portland and put into use the long empty elevators that stand on the waterfront, it is believed.

## NEW JERSEY

Mount Holly, N. J.—Fred Boyd of Clermont recently purchased the feed mill and warehouse formerly operated by Charles E. Rogers and has reopened it for business.

Vineland, N. J.—L. Sheard & Son has installed its second Kelly Duplex Feed Mixer, with motor drive. The new machine is of one-ton capacity and of the new style with screen attached for screening all feed that enters the mixer. The screen is driven with separate 1-h.p. motor. The mixer and screen are both all ball bearing. All strings and other foreign matter is removed from the feed by means of this screen, assuring the operator of perfectly clean feed.

## NEW YORK

Pomona, N. Y.—Frank C. Frederick recently installed a No. 2 one-ton capacity Kelly Duplex Vertical Feed Mixer, floor level feed and with 5-h.p. motor drive.

Lockport, N. Y.—In the bankruptcy proceedings involving Niagara Falls Milling Co., an order was entered by the judge referring the case for further action to Hon. Warner F. Thompson, referee.

Geneva, N. Y.—F. E. Cowan, former manager of the Morten Milling Co. at Dallas, Tex., was severely injured in a train wreck near Hudson, N. Y., only 10 days after his appointment to the managership of the Finger Lake & Hudson Flour Mills here.

Baldwinsville, N. Y.—Operation of the Baldwinsville plant of the Semolina Mills, Inc., probably will not begin until May 15, Charles T. Olson, vice-pres. of the company and manager of the plant announced. Delay in receiving machinery and new equipment was given as the reason for the deferred opening.

Buffalo, N. Y.—The Buffalo Corn Exchange had a net loss of \$4,046.09 for the year ended March 31, 1938. This deficit was due to the small amount of grain moved thru the port of Buffalo, with resultant low inspection and weighing receipts, it is explained. The statement shows assets, including cash and bonds, amounting to \$46,711.08. Total inspection fees in the year amounted to \$63,881.93 and the weighing fees were \$29,615.12. A movement is on foot to air-condition the trading floor.

Buffalo, N. Y.—At meeting of directors of the Corn Exchange, held April 19, to represent the exchange for the ensuing year, J. G. McKillen was elected pres. and E. B. Black was elected vice-pres. Other officers elected: Dan A. Southwell was re-elected treas. and Fred E. Pond, re-elected sec'y and assistant treas. Preceding the organization meeting of the board of directors the annual meeting of stockholders was held for the purpose of electing three directors for the ensuing three years. The three directors whose terms expired were Geo. B. Wood, C. C. Lewis, J. G. McKillen. The three new directors elected for a three-year term were J. G. McKillen, re-elected, J. B. Stouten, F. C. Greutker.

## NEW YORK CITY LETTER

James T. Munds, a member of the Chicago Board of Trade, and of Munds, Winslow & Potter, died Apr. 19.

New York, N. Y.—William C. Mott, 66, a member of the grain trade and of the Produce Exchange for 44 years, died April 6.

The New York Produce Exchange Golf Ass'n will hold its annual spring tournament at the Richmond County Country Club, Dongan Hills, Staten Island, May 19. Competitors will try for the James Barber memorial trophy as well as other prizes. All exchange members are eligible to compete and bring guests. Edward J. Barber is pres. of the ass'n.

New York Produce Exchange has elected William Roberts of H. W. Hooper & Co., Liverpool, England, to regular membership, and to associate membership, Harry S. Baker, Producers Cotton Oil Co., Fresno, Cal.; Julien Lafayette Brode, The Brode Corp., Memphis, Tenn.; Edward Stotesbury Hutchinson, Philadelphia, Pa.; William Wry Nash, J. A. Nash & Co., New York.

## NORTH DAKOTA

Berlin, N. D.—Equity Elvtr. & Trading Co., reported windstorm damages received recently.

Willow City, N. D.—Burglars entered the Farmers Elevator here recently, escaping with \$250.

Fargo, N. D.—Farmers Co-op. Elvtr. Co. of Noonan is a new member admitted to the Farmers Grain Dealers Ass'n of North Dakota.

Hamilton, N. D.—A new 20-ton scale with Strong-Scott Dump was installed in the grain elevator owned by the National Atlas Elvtr. Co. The installation was made by the T. E. Ibberson Co.

Manvel, N. D.—A 35,000 bu. annex to the 30,000 bu. elevator of the Farmers Union Elevator Co., bringing the total capacity to 65,000 bu., has been completed. Hogenson Constr. Co. had the contract.

Rolla, N. D.—W. M. Elliott's elevator is being repaired and painted. Re-siding is being done on both the elevator and the coal sheds wherever needed. The interior of the elevator is also receiving repairs.

Poland (Ardoch p. o.), N. D.—Installation of a 20-ton scale and Strong-Scott dump was made at this point for the National Atlas Elevator Co. by the T. E. Ibberson Co.

Fargo, N. D.—A. M. Eggen of the Northwestern Department of the Mill Mutuals became assistant manager of the Northwestern Department March 1. He had been representing that organization in Wisconsin for the past 10 years.

Grandin, N. D.—A dust explosion at the Farmers Grain Co. of Grandin elevator April 20 blew the roof off the elevator and feed mill and severely burned Frank Duntley, 43, mill operator. He was rushed to a Fargo hospital for treatment. The injured man told company officials he believed a rock entered the fast moving grinding apparatus of the mill, causing a spark which resulted in the explosion and fire.

## OHIO

Defiance, O.—Ralph Parker has installed a corn sheller and mixer.

West Jefferson, O.—Myron A. Silver, 77, retired grain dealer, died Mar. 30.

Mount Sterling, O.—Teegardin-Cook Grain Co. reported windstorm damages it sustained early in March.

Elida, O.—Elida Equity Exchange recently purchased a corn cracker and grader from the Sidney Grain Machry Co.

Wooster, O.—John Pfaffenbach, 58, grain merchant here for the last 12 years, died in a Cleveland hospital Mar. 23.

Cedarville, O.—Cummings & Creswell recently installed a new No. 2 one-ton Kelly Duplex Vertical Feed Mixer with motor drive.

Apple Creek, O.—Andrew Klener has just installed a No. 1 one-half-ton capacity Kelly Duplex Vertical Feed Mixer, belt drive.

Cincinnati, O.—John E. Collins, 83, retired, former head of Collins & Co., grain merchants, died April 7. He had been in poor health for four years.

Piqua, O.—Holland Mills is now established in its elevator here, with new equipment thruout, all machinery furnished by the Sidney Grain Machry Co.

Mt. Victory, O.—R. B. Cougill, owner of the Mt. Victory Milling & Grain Co., has purchased the elevator recently operated by Edward Breidenbach. The elevator will be remodeled and modernized with new machinery.

Bellefontaine, O.—Walko Feed Mills has made considerable improvement with a hammer mill complete with ammeter, magnetic separator, and feeder and also a new mixer, all furnished them by the Sidney Grain Machry Co.

Bloomville, O.—Lease of the Bloomville grain elevator to the Tiffin Farmers Exchange Co., with option to purchase, has been announced. The elevator is owned by Mrs. Mildred L. Einsel, and has been operated for the last 11 years by Sneath-Cunningham Co.

Foraker, O.—Definite plans for rebuilding the Foraker Farmers Exchange Elvtr., which was burned recently have not been decided upon according to G. W. Kraft, the owner. Guy Sprang is manager of the burned plant.

Cincinnati, O.—Louis Christian Klein, 77, agent for the B. H. West Co., grain and coal dealers, died April 12 at the home of his daughter in Colfax, Ind., whom he was visiting. His death was caused by a heart ailment. Mr. Klein was a veteran in the grain business in Cincinnati, having been employed by the West Co. for the last 15 years.

Toledo, O.—Three buildings, including the chief mill of the Saunders Mills, Inc., with all equipment and a large quantity of raw and manufactured products, were destroyed by fire April 14. C. H. Saunders, its pres., estimated the loss at \$350,000. Either spontaneous combustion or spark from motor smoldered in meal is believed to have caused the blaze. The company had another fire Dec. 9, 1937, with a loss amounting to between \$30,000 and \$50,000.

Kessler (West Milton p. o.), O.—Ed. S. Falknor Grain Co., formerly known as G. N. Falknor Sons, operators of grain elevators at Troy and West Milton, have leased the grain elevator and equipment on the C. C. C. & St. L. railroad here and will conduct the business on the same policies that have built up a successful trade at its original plants. Earl A. Falknor, who has managed the West Milton plant for the last 33 years, is retiring due to ill health. Ed. S. Falknor will actively manage the company's interests and his son, Don, will be manager of the Kessler elevator, utilizing the training he has acquired at the Troy plant over the last several years.

Toledo, O.—William H. Haskell, Toledo grain and milling executive, aged 74 years, died recently in Sarasota, Fla., following a heart attack suffered a few days before. Mr. Haskell was born in Essex county, N. Y., coming to Toledo at the age of 19 years when he entered the milling business. He organized the Miami Maize Co. in 1891, selling the business two years later and organizing W. H. Haskell & Co., operators of a corn mill, which operated until 1919. Mr. Haskell at one time operated the Toledo Salvage Co. and jointly with Brooks Elvtr. Co. handled some large grain elevator fire salvage. He was one of the founders and organizers of the Toledo Lumber and Mill Work Co. and for many years was a director of the Commerce Guardian Trust & Savings Bank. He was a member of the Toledo Board of Trade.

Columbus, O.—The program being prepared for our 59th annual meeting at the Deshler-Wallick Hotel in Columbus on June 26-27-28 promises to be an interesting and instructive one. We plan to hold a grain grading school under the supervision of Willis B. Combs, senior marketing specialist, U. S. Dept. of Agri., Chicago. There will be no charge for the school and all of our members and their employees who are interested in the grading of grain are invited to attend. All equipment for the testing of grain will be furnished and all you will have to bring is a pair of small tweezers to enable you to pick the grain as instructed. Many important matters will be presented by speakers well versed in their subjects. There is still time to make additions to the program if you have any special subject that you would like to have discussed. Round table discussions will be numerous at the regular meetings starting Monday, June 27, at 10:30 a. m. The annual banquet will be held Monday evening, June 27, at 6:30 o'clock. This date seems a long way off but it will be here before you know it, so begin to plan your affairs now so you can be with us. We are still trying to get some concessions on the demands of the State Industrial Commission in regard to the new manlift code. The Commission expects to send the code to the printer within ten days, unless we can show them that their demands will prove too expensive to the elevator operators, and, with this in view, we contemplate having a millwright install the necessary equipment in some elevator near Columbus to ascertain the exact cost of the work. This matter has been dragging out a long

## STRATTON GRAIN CO.

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time but it simply has been impossible to rush matters unless we would accept the restrictions they were trying to foist on our members. Further reports will be given you in later bulletins.—Ohio Grain Mill & Feed Dealers Ass'n, W. W. Cummings, sec'y.

## OKLAHOMA

Laverne, Okla.—A new truck dump and new automatic scales have been ordered for the Kimball elevator. George Dain is local manager for the company.

Okemah, Okla.—Erection of a grain elevator for the district about Okemah is being urged by C. R. Sawtell, commercial agent for the Fort Smith & Western R. R.

El Reno, Okla.—The Waldo Alfalfa Milling Co., Oklahoma, has been organized, with capital stock, \$100,000. The home office will be in El Reno, with a Texas office, Steel store, Brazos county.

Covington, Okla.—C. H. Kennedy is the new manager of the Covington Co-operative Elevator Co., succeeding former Manager Hughes. The company will operate as an independent farmers elevator after May 1.

Tillman, Okla.—A co-operative elevator has been organized here. Prominent farmers heading the organization are Henry Payne, pres.; Fred Wiersig, sec'y-treas., A. A. Milner, Robert Seyford and G. W. Randell, directors.

Carnegie, Okla.—John Dick, who has been connected with the Chickasha Mill & Elvtr. Co. for the past 10 years, the last seven of which he was manager of the local plant, has resigned. C. A. Buford, who has been with the company at Mountain View for the past year, has been chosen to fill the vacancy here. He will move his family here in the near future.

Waynoka, Okla.—Fred Schmolke was elected manager of the Farmers Co-op. Elvtr. Co. at a meeting of the board of directors held April 1. He succeeds J. L. Davis, who resigned. Mr. Schmolke has served as sec'y of the co-op. ass'n for the past four years. Mr. Davis has served as manager of the elevator since its organization. He will make his future home in Enid.

Enid, Okla.—The Union Equity Co-op. Exchange has leased the Farmers National elevator for a period of 12 months beginning June 1. This brings the Union Equity storage capacity to 3,125,000 bus. Seventy-five stockholders and local organizations are represented in the membership of the Union Co-op. Exchange covering a territory extending from Walters on the south to the Kansas line, including Medford and Wakita, west to Spearman, Tex., and east to Morrison, Red Rock and Newkirk. The Farmers Co-op., associated with the Union Equity Co-op. Exchange, recently announced construction on three new elevators at Bison, Wakita and Kremlin, as previously reported in the Journal.

Vici, Okla.—An air compressor tank owned by the Farmers Co-operative Ass'n exploded on April 6.

## PACIFIC NORTHWEST

Fenn, Ida.—T. E. Robinson, of Nezperce, is building a 150,000-bu. cribbed elevator here.

Lauer, Wash.—The Milwaukee Grain Elevator Co. is having its local elevator remodeled.

Kamiah, Ida.—A 110,000-bu. addition is being built on the local elevator of T. E. Robinson of Nezperce.

Genesee, Ida.—Frank Hoorman, manager of the Farmers Union Elvtr. Co., has announced plans to install grain cleaning machinery at an early date.

Waterville, Wash.—The Masonic building is being remodeled to make room for the Milwaukee Grain Co. J. R. Marney is manager of the grain company.

Fairfield, Wash.—Construction of the new 100,000-bu. cribbed and iron-clad elevator for the Fairfield Farmers Alliance Whse. & Elvtr. Co. is reported under way.

Spokane, Wash.—The annual meeting of the Pacific Northwest Grain Dealers Ass'n will be held in Spokane at the Davenport Hotel on June 17. The meeting will last only one day and members are urged to be present. Suggestions in regard to the program or general business for the session are solicited.—Ted Brasch, sec'y.

Hoquiam, Wash.—Work has started on the construction of the \$50,000 shore fish reduction plant which the Pacific Sardine Products Co., Inc., plans to build on the old Hoquiam Lumber & Shingle Co. site on the Hoquiam river. The plant will be equipped with the latest of new machinery thruout, and will have a capacity for the reduction of 25 tons of fish an hour into meal and oil. The new plant will be ready for operation by mid-June, it is announced. Incorporators of the company are C. A. Pitchford of Aberdeen and John Mirkovich and Anton Stanovich.

## PENNSYLVANIA

Hydetown, Pa.—Wills Mead is sole owner of the recently organized Hydetown Milling Co.

East Berlin, Pa.—The East Berlin Milling Co. was purchased recently by Owings Bros., grain and feed dealers, from the proprietors, E. B. Eisenhart and John E. Gentzler. Richard Riggs, an employe of Owings Bros. at Seitzville, will be in charge of the East Berlin mill when it is in the possession of the new owners July 1.

## SOUTH DAKOTA

Rapid City, S. D.—Tri-State Milling Co.'s new six-story mill has started grinding on a 24 hour per day schedule.

Britton, S. D.—The work of tearing down the two old elevators here, the old Empire elevator and the old Dougherty elevator, has been practically completed.

Brandt, S. D.—Farmers' Union Supply Co., Inc., has been incorporated; capital stock, \$25,000; incorporators: Emil G. Gerth, Estelline; Mark H. Thompson, M. J. Vik, H. C. Anderson and Charles Hofman, all of Brandt.

Jefferson, S. D.—Alex Chicoine, widely known grain man, pres. of the Farmers Elvtr. Co., signed the first grower's agreement with the Sioux City Agrol Co. April 1. This marked the beginning of actual business operations for the proposed new \$500,000 plant. In all about 100,000 bus. had been contracted for by April 13. Each contract covers a 10 year period.

Sioux Falls, S. D.—Hugh S. Gamble, as vice-pres. of the bankrupt Burke Grain Co., pleaded nolo contendere to a technical transgression of the commodity exchange act in federal court April 8 and was put on probation for 18 months. Mr. Gamble was named jointly with Stephen A. Burke, pres. of the Burke Grain Co., as having continued the business after its registration had expired; not segregating accounts of money handled, and using margins on personal grain transactions. Thru his attorney Mr. Gamble argued he had not actual knowledge of the affairs of the company. The legal plea of nolo contendere is neither a plea of guilty or not guilty, but amounts simply to a statement that the defendant will not contest the charge.

## SOUTHEAST

Tasley, Va.—Peninsula Milling & Feed Co., recently installed new machinery, increasing the capacity of its plant.

Murphy, N. C.—The new \$10,000 plant of the Murphy Mills, built to replace the one burned down last year, has been completed and is now in operation. New equipment includes corn milling, feed manufacturing and flour milling machinery. K. Y. Weaver is owner of the plant.

Greenwood, Miss.—A group of delta planters met recently and considered the advisability of installing a grain elevator with storage facilities in Greenwood, to take care of seed, grains and feed stuffs raised in this vicinity. A committee was appointed by Hugh L. Gray, chairman of the Agriculture committee of the Greenwood Chamber of Commerce, to investigate the need for and advantage of having grain storage facilities in this community. Members of the committee are Luther Wade, P. S. Stubblefield, Greenwood; and Joe Pritchard, Inverness.

Pensacola, Fla.—Among many developments outlined in a program of progress for Pensacola following the recent successful negotiations between the city council and the Frisco Lines, which have placed this city in a position where it can own a valuable port asset, is the building of a big terminal elevator. According to R. H. Turner, chairman of the special com'te of the planning board, the grain elevator is "the greatest factor for the future welfare of Pensacola." He holds that the construction of the elevator to bring ships to the port would be only the forerunner of more industries locating here and would spell better times for everyone.

## TEXAS

San Antonio, Tex.—Emil Zuhike, 77, retired grain and feed dealer, died recently at a local hospital.

Amarillo, Tex.—The Grain Growers, Inc., has changed its incorporation and name to Producers Grain Corp.

Amarillo, Tex.—The annual convention of the Panhandle Grain & Feed Dealers Ass'n will be held here May 23 and 24.

Lamesa, Tex.—The L. C. Steele & Son feed mill was destroyed by fire recently with a loss estimated at between \$1,500 and \$2,000.

Houston, Tex.—Burglars escaped with \$1,562.77 from the safe of the Archer Grain Co. recently after knocking off the combination knob. The loss is reported to be covered by \$1,500 of insurance.

Denton, Tex.—The Morrison Milling Co. is installing new wheat cleaning machines and a scourer. Other improvements have also been made at the plant, including the building of a switch track to the mill.



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Accurate powder feed—high speed, force feed eliminates packing of chemical powder.

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Fort Worth, Tex.—Plains Grain Co., of Abernathy, has been added to the membership of the Texas Grain & Feed Dealers Ass'n.

Muenster, Tex.—Roy Enders has resigned as manager of the Farmers Marketing Ass'n to become manager of the Muenster Milling Co.

Coleman, Tex.—Improvements costing around \$5,000 are being made by Burdick & Burdick at its elevator. The elevator is being rebuilt and an elevator dumping system is being installed so that a rail car of grain can be loaded every 40 minutes. An 8,000-bu. storage place is nearby.

Amarillo, Tex.—The Amarillo Grain Exchange has awarded the contract for a one-story brick grain laboratory to Neil Singleton. The laboratory building is to be built on East Fourth A. e. at the cost of approximately \$10,000. Work has already started and the structure is to be completed during May.

Fort Worth, Tex.—All officers and directors were re-elected for another year at the annual meeting of the Fort Worth Grain & Cotton Exchange, Apr. 18. They are: W. B. Newsom, pres.; R. E. Cowan, vice-pres.; and J. C. Crouch, W. P. Bomar, M. C. Rall, J. C. Simons, and Leo Potishman, directors. Mr. Bomar continues as treas., and E. B. Wooten enters his 30th consecutive year as sec'y.

## UTAH

Nephi, Utah.—The grain warehouse of the Central Utah Grain Growers, Inc., was damaged by windstorm recently.

## WISCONSIN

Cambridge, Wis.—Adolph Strobusch and Stanley Qualle have bot the Jones Feed Co. They will improve the plant.

Barron, Wis.—Jerome's Hatchery and Feed store has purchased the Barron stock and business of the New Richmond Roller Mills.

Potter, Wis.—The William Lerche elevator has incorporated and the new corporation will be known as the Potter Elvtr. Co. The personnel of the new firm is H. C. Timm, New Holstein; Herbert Krueger, Forest Jct.; William Lerche, manager.

## MILWAUKEE LETTER

Milwaukee, Wis.—The petition of 20 eastern insurance companies to transfer the \$605,800 damage suit of the Krause Milling Co. from circuit to federal court has been granted. The complaints filed by the Krause Milling Co., whose plant was damaged by fire and explosion in which nine persons lost their lives, April 10, 1937, claimed a loss for "use and occupancy" of the property for a year after the fire. The petition pointed out the litigation was between corporations of different states.

Milwaukee, Wis.—At the annual meeting of Milwaukee Grain & Stock Exchange Clearing Ass'n the following named stockholders were re-elected to serve as directors for the ensuing year: W. A. Hottensen, E. J. Koppelkam, A. L. Flanagan, Jos. Lers, E. H. Hiemke, A. D. Bennett, G. W. Winton; John L. Bowles re-appointed traffic manager of the Exchange for the ensuing year, A. A. Breed, chief grain inspector, and M. H. Ladd, chief weigher; grain and railroad com'te, W. A. Hottensen, Chas. A. Krause, Christian Kurth, Jr., O. R. Sickert and H. M. Stratton.

Milwaukee, Wis.—Pres.-Elect Edward S. Terry of the Grain & Stock Exchange, said at the annual meeting of the Exchange Apr. 11: If it had not been for the favorable receipts of barley in our market the past two years, the financial condition of the Exchange would be worse than it is today. It must be the endeavor of each member to augment our revenue by attracting every bushel of grain possible for our market and to do this no opportunity must be lost to solicit for Milwaukee as against competing markets. A recurring deficit this last year has made necessary an increase in dues. This, with advanced inspection fees, should increase our revenue, and reducing the burdensome overhead of the stock department will materially help our financial position. However, I feel that further retrenchment can be made without impairing the efficiency of operation of various departments and it will be my endeavor to put our Exchange on a sound basis; in other words, make it self-sustaining at least, instead of piling up yearly deficits.

## Coercion by Any Other Name!

By WALTER E. SPAHR, Professor of Economics, New York University.

The Agricultural Adjustment-Act of 1938 constitutes one of the outstanding efforts of the Federal Government to push farther the regimentation of farmers, and to apply its program of economic scarcity. This crazy law allows the Secretary of Agriculture, among other things, to dictate to farmers how much wheat, corn, cotton, rice and tobacco they may plant, and how much they will be allowed to market.

The marketing quotas will apply when total supplies exceed prescribed amounts, and will become mandatory upon all farmers, if approved by a two-thirds vote of the farmers. Penalty taxes are to be levied upon products marketed in excess of these quotas, and the penalties are to be enforced by the Department of Justice and the Federal Courts.

There is your "economics of scarcity" in all its ugliness, and there is a sample of the regimentation involved—with penalties attached.

In the face of these very simple facts, Secretary Wallace had the effrontery to say over the radio that "The farmers of the nation now have an opportunity to march along the path of agricultural economic democracy under the banner of abundance!" Every reader can try to answer for himself the question as to why Secretary Wallace should make that statement in the face of facts which show that his statement is absolutely untrue.

Having been raised on a farm, I know something of farmers and their problems. At the same time my years as an economist have taught me that the recent Agricultural Act is not only thoroughly ridiculous, economically, but is a mean and devastating attack upon the independence of farmers and upon their right to produce as they think best.

When farmers learn that along with all the other burdens and headaches they endure, they are to be penalized for what they do produce, I do not believe they will stand for such a piece of economic and political madness. If the farmers are willing to sell their freedom for "thirty pieces of silver," then I have misjudged their general hard-headedness, backbone and good commonsense. If I understand my Constitutional Law, and if the Supreme Court will adhere to it, the law will be declared unconstitutional.

## Grain Cleaning

[Continued from page 342]

entirely eliminating that jumpy action heretofore created by eccentrics which causes the straw joints and foreign grains to tip up and go thru the perforations with the good grain.

Then we have on the market a new type needle machine with motor driven brushes which increase the cleaning capacity immensely.

I, for one, am facing the future with confidence that whatever the grain cleaning problem may be, it will not take long for our present aggressive grain cleaner manufacturers to solve that problem and bring forth a new machine, or a combination of existing machines, which will ever have a broader field of usefulness, and yet do many specific tasks better than ever before.

Durum wheats are rust resistant to the extent that they have heavy stems with a thick, tough outer covering. It takes the rust spores longer to eat thru this outer covering on durum wheat than it does to penetrate the thin covering on the commonly known bread wheats. The element of time is the controlling factor on whether the wheat will make a good crop. If the wheat is filled before the rust spores break thru the outer coat on the stem and attack the plant veins a crop is made. If the rust spores reach the veins before the head is filled, circulation is stopped and the plant dies without filling.

## Cipher Codes

**Universal Grain Code:** Most complete, up-to-date grain code published. Effects a greater reduction in tolls than any other domestic code. 150 pages, 4½x7 inches. Price, leather, \$3.00; paper, \$1.00.

**Robinson Telegraph Cipher Code:** Revised with all supplements, for domestic grain business. Leather, \$2.50; cloth, \$2.00.

**Dowling's Grain Code for Grain Milling and Produce Trades,** 6th edition: Used extensively in Western Canada. 154 pages. 4½x6½ inches. Weight 4 ozs. Price \$3.00.

**Millers Telegraphic Cipher:** (1936) For the flour feed and grain trades. 157 pages, 3½x6½ inches. Cloth bound. Weight 6 ozs. Price \$2.00.

**Cross Telegraphic Cipher:** 10th edition revised for provision and grain trades. 148 pages, 4½x5½ inches. Cloth \$4.00.

**A. B. C. Improved Fifth Edition with Sup.:** Reduces cable tolls 50% thru use of five-letter words, any two of which may be sent as one. In English. Price, \$20.00.

**Bentley's Complete Phrase Code:** Contains nearly 1,000 million combinations, any two of which can be sent as one word. Thru its use a saving of 50% can be effected in cablegrams. 8½x10½ inches. Leather back and corners. \$10.00.

**Peerless Grain Code for international grain and feed trades.** 300,000 different offers expressed by one half codeword combining Destination, Time of Shipment, Quantity, Quality and Price. 10,000 complete Phrases relate to Export grain trade. Private Supplement contains 3000 blank code words. Price \$85.00.

**Baltimore Export Cable Code:** Hinrich's fourth edition, completed especially for export grain trade. 152 pages, 6½x9 inches, bound in leather. Price \$15.00.

**Riverside Flour Code, Improved (5 letter revision):** Sixth edition. For use in domestic and export trade. Size 6x7 inches, 304 pages. Bound in flexible leather, \$12.50.

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# Field Seeds

**Algona, Ia.**—A new hybrid seed corn plant under construction here will be locally managed by Robert Poindexter, of Des Moines.

**Garden City, Kan.**—The Kansas Agricultural Experiment Station has called for bids for construction of a \$5,000 feed and seed warehouse.

**Walla Walla, Wash.**—Young & Lester, local florists, have entered the wholesale seed trade, to work in the five Pacific Northwest states.

**Aurora, Ill.**—Albert J. Erlenborn, 71, a seed merchant here for the last 48 years, died in the Copley hospital a few days ago, following a brief illness.

**Portland, Ore.**—Stewart C. Kellett of Grants Pass, has leased a store room here which is being remodeled and modernized for use as a seed store.

**Lisbon, N. D.**—A seed cleaning division has been opened in Lisbon by Erick Rosedal in the local seed house. Eugene Johnson, formerly of Thief River Falls, Minn., is manager.

**Albany, Ore.**—A huge, 120 ft. wide seed warehouse, belonging to William Vollstedt, is being moved to a new location across the tracks to make room for an overhead railroad crossing.

**Fremont, Neb.**—Ben Harrison, production manager for the DeKalb Agricultural Ass'n, De Kalb, Ill., is contracting 500 acres of land in this territory for production of hybrid seed corn.

**New York, N. Y.**—New York received 627,000 bus. flaxseed during March, compared with 950,000 bus. in March, 1937. Shipments were 2,076 bus. clover seed, compared with 17,494 in March, 1937.—Produce Exchange.

**Tipton, Ind.**—Pioneer Hi-Bred Corn Co. has contracted 800 acres of land in this territory for production of hybrid seed corn to serve a new plant that will be built during the spring and summer. Indiana headquarters for this Iowa firm are at Flora.

**Winnipeg, Man.**—The Associate Com'te on Grain Research, meeting here early in April, announced only six varieties of barley as eligible for malting grades in Canada. They are O.A.C. 21, Mensury Ottawa 60, Manchurian, Mensury, Peatland and Gartons. Varieties recommended by the com'te are O.A.C. 21 and Mensury Ottawa 60.

**Manhattan, Kans.**—Wheat producers in 24 central and eastern Kansas counties will have an opportunity during June to observe how wheat in their county compares with the best adapted varieties when a series of field days will be held at wheat crop-testing plots in these counties under the sponsorship of the Southwest Wheat Improvement Ass'n, Kansas State College, and county farm bureaus. A schedule of field days for the various counties has just been announced by John H. Parker, field director for the crop-testing plan, Kansas State College.

**Little Rock, Ark.**—Seed permits of the Scott County Milling Co. at Sikeston, Mo., which were cancelled by the Arkansas State Plant Board Mar. 9 because of shipments of misbranded oats, were reinstated Apr. 18, when the Scott County Milling Co. agreed to adjust complaints of crop losses which may result from possible low germination of the oats.

**Grinnell, Ia.**—Stanley Jorgensen has been appointed resident manager of the new hybrid seed corn plant that the DeKalb Agricultural Ass'n, of DeKalb, Ill., will operate in a former washing machine factory here. The DeKalb organization purchased the factory recently and plans extensive remodeling during the summer. Mr. Jorgensen is contracting acreage for the production of hybrid seed corn.

**Little Rock, Ark.**—Seed sales permit tags of the Farmers Grain Co., Fayetteville, Tenn., were cancelled by the Arkansas Plant Board Apr. 8, when 59 bags of Korean lespedeza, shipped to Little Rock, were found to contain as high as 3,726 seeds of cheat per pound of pure seed. The seed was condemned and shipped back. Arkansas law prohibits sale of seed containing more than 250 cheat per pound.

**Amherst, Mass.**—Massachusetts Agricultural Experiment Station has published its 10th annual report on seed inspections. Official seed samples, says this report by F. A. McLaughlin, were collected from the open markets in 86 towns and cities in Massachusetts, and analyzed at the station's Seed Testing Laboratory. During the 14 months ending Dec. 1, 1937, the laboratory worked 2,180 samples of seed, of which 874 were collected by the State Commissioner of Agriculture, 1,143 were sent in by seedsmen and farmers, and 173 for cooperative research.

**Geneva, N. Y.**—New York's seed law plays no favorites. Selling seeds to earn money for themselves or to win prizes for their schools makes children "seed venders" under the terms of the law and makes them liable for the accuracy of all statements appearing on the packets they offer for sale, says Prof. M. T. Munn, head of the state's seed testing laboratory at the experiment station.

## Don't Wait Too Long for Seed

John W. Nicolson, of the Henry Field Seed & Nursery Co., Shenandoah, Ia., after a careful study of the new farm bill and after adding up known available stocks of seeds, advised the trade as follows:

"Even counting all the cheap and plentiful timothy and lespedeza, if farmers of the U. S. A. generally seed down 10% of their acreage we will have a shortage of about 20% of total seed supplies needed for that requirement.

"The government soil building payments alone cover more than the cost per acre of seeding most crops except red clover and alfalfa and underwrite half the cost of these. Not to mention about \$250 payment per 160 acres for maximum compliance on good land with the balance of the program.

"What will happen to the farmer who leaves Moral—Buy seed now to get the kind you want his seed buying until the date of planting? at a reasonable price."

**Bloomfield, Ia.**—Ray C. Randall, senior agronomy student at Iowa State College, has been placed in charge of production and breeding work for the Iowa-Missouri Hybrid Corn Co., according to Manager Earl Langfitt, of this new firm.

**Perris, Cal.**—A strain of Double Dwarf Milo developed by the University of California has been giving a good account of itself in Riverside county fields. The 27 acres planted by Charles Myers, Hemet, in 1936, produced 57 tons, or more than two tons per acre. Last year 26 acres on the Myers farm yielded 52 acres, or exactly two tons per acre. Eleven acres planted last July 4 by Charles Foss, Perris, in rows 33 inches apart, and irrigated five times, produced 39,600 lbs. or nearly two tons per acre. Double Dwarf Milo has been planted in rows varying from six to 36 inches apart. Best results came from spacing the rows 16 to 18 inches apart. Liberal irrigation is necessary after the plants start to head.

## New Seed Trade Marks

"Funk Farms" and "Funk Bros. Seed Co.," imprinted on a medallion is trade mark 401,142, filed by Funk Bros. Seed Co., Inc., Bloomington, Ill., for legume seeds, seed grains and grass and field seeds.

## Nebraska Will Have Crop Improvement Ass'n

A movement has been started to organize a permanent crop improvement ass'n in Nebraska similar to those now operating in the Northwest and the Southwest. Members of the Omaha Grain Exchange, millers, and the agricultural com'te of the Omaha Chamber of Commerce are behind the movement.

Improving the quality and increasing the yield of Nebraska wheat and introduction of malting barley in the eastern third of Nebraska, are among the purposes of the Ass'n.

## Thatcher Wheat Is Approved

Thatcher wheat, a favored variety of hard spring wheat in Manitoba and large sections of Alberta and Saskatchewan because of its ability to resist rust, has received approval by the Associate Com'te on Grain Research in Canada for all Manitoba northern grades.

This approval gives Thatcher a standing equal to Marquis for milling and baking, rating it as high as No. 1 northern Manitoba. The action follows commercial milling tests by English millers.

Final action giving Thatcher a Northern Manitoba grade is expected from the Canadian Grain Board at an early date.

## Improved Varieties of Oats

It has been found that Gopher, a variety developed by the Minnesota station is earlier than Big Four, widely grown in Indiana, and higher in yield by three bushels, in addition to being higher in test weight. The Gopher has a rather short, stiff straw and should be grown on good soils, where lodging is a problem.

Cartier, a new oat from Canada, has yielded even better than the Gopher, grows taller but weaker straw and ranks the highest of all varieties tested in weight per bushel. It is a promising variety on fair to medium soils. Wayne, a new Ohio oat, is earlier than Big Four, much stiffer stalked and higher yielding.

Columbia, a grey oat from the Missouri Station, has given splendid results in southern Indiana where it out-weighs and outyields practically all other varieties.

## Directory

### Grass & Field Seed Dealers

CRAWFORDSVILLE, IND.  
Crabbs, Reynolds, Taylor Co., clover, timothy.

GREEN SPRINGS, OHIO  
The O & M Seed Co., seed merchants.

PAULDING, O.  
Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.  
Mangelsdorf & Bro., Ed. F., wholesale field seeds.

## ED. F. MANGELSDORF & BRO.

Buyers and sellers of  
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas  
St. Louis, Missouri



## Milwaukee Urges Planting Good Barley Seed

Wisconsin grain and feed dealers are urged to use their influence to promote the planting of dependable malting barley seed, in a letter broadcast by the Milwaukee Grain & Stock Exchange.

The Exchange quotes Martin Johnson, federal grain supervisor at Milwaukee, as its informant of a serious threat to Wisconsin's reputation as a grower of good malting barley arising from the sale of poor quality seed to Wisconsin farmers, presumably by itinerant truckers, or out-of-state dealers.

"Large quantities of inferior seed," declared the communication, "not suited for malting purposes, are being shipped into the state . . . threatening the serious deterioration of the quality of malting barley produced in the sections where such seed is used."

Dealers were urged to contact their farmers and caution them against seeding any but pure Wisconsin No. 38 or Oderbrucker type barley for malting purposes. Some barley seed sold for pure Wisconsin 6-rowed barley has contained from 10 to 80 per cent 2-rowed barley, the communication declared.

Farmers are urged to send samples of their proposed seed barley to the Wisconsin state seed laboratory or Milwaukee's federal grain supervisor for analysis.

## Dust Explosion at Albert Lea, Minn.

At 3:45 p.m., Saturday, Apr. 9, an explosion of dust started a fire in one of the upper floors of the Ward Dry Milk Co., at Albert Lea, Minn., which fire spread until the entire plant was burned.

The mill, elevator and large warehouse were formerly operated by a milling company turning out wheat, rye and buckwheat flour. The buildings were old and covered with corrugated steel. The expensive machinery in the buttermilk drying plant ran the loss up to \$200,000.

Besides buttermilk products the company, which is a subsidiary of the Kraft-Phenix Cheese Co., Chicago, manufactures flour, there being 5,000 bus. of rye and several thousand bus. of other grain in store.

## Falling Stack Marks Power Trend

The falling chimney shown in the engraving herewith was built in 1898 by an enterprising grain dealer at Carson City, Mich., who built it large enough to furnish power for the grain elevators and to drive generators supplying electricity to light the village.

He had erected the elevator in 1887 and had the house filled with grain before the Grand Trunk Western Railroad had been completed into Carson City, ready for loading as soon as cars could be spotted under the elevator spout.

For many years the elevator power plant continued to serve the community until central power stations operating large units with steam boilers getting all possible energy out of a pound of coal extended their power lines to rural communities.

This power house was taken down many years ago and the equipment disposed of, but the stack remained until recently, when it was toppled over as shown in the engraving. Thus passed a landmark that had stood for forty years.

This change in power generation from individual scattered plants of low efficiency to large central units brought electricity at low cost to the smallest grain elevator, enabling operators to discard the steam engine and gasoline engine and replace it with one or more electric motors, so that now electric motors are standard equipment in grain elevators at country stations as well as at central markets.

Engineers believe that while electric motors with individual drives at each machine are a permanent development, improvements in recent years in the design of internal combustion engines have so lowered the cost of generating power in diesel engines of smaller sizes as to constitute real competition against central stations having high costs of distribution, creating a trend toward local generation of power.

A. J. Goulet, manager of the Rockafellow Grain & Seed Co., now operating the elevator at Carson City, has hit on the happy thought of capitalizing on the familiar chimney landmark by using it as an illustration for one of

his brands of seeds which will be titled "Landmark Brand" on 1-bu. cotton bags in which all of the company's seeds will be packed in future for Michigan trade.

## Weighing Grain into Cars

By J. A. SCHMITZ, Weighmaster Chicago Board of Trade

Shippers should know the correct weight of the grain they load into cars to substantiate claims and succeed in recovering for any possible loss of grain in transit; and, also, to qualify them to judge the reliability of settlement weights. It follows then that the primary factors involved are good scales correctly installed, maintained and operated, grain-tight loading equipment, and complete and dependable weighing and loading records.

The deciding elements may be analyzed as reliable scales, operation of scales, orderly methods of checking the weights, certain delivery of all grain to car, and complete methodized records.

**RELIABLE SCALES.**—This term does not refer to any particular make, type or capacity of scale, but to a scale's weighing correctly within commercial tolerances. Only by testing a scale with sufficient "known weight," can the degree of its efficiency and correctness be ascertained.

**OPERATION OF SCALES.**—Manufacturers, and others qualified to do so, have prescribed, for the guidance of users, certain well defined rules and instructions for the operation of each style and type of scale on which grain is weighed. Users should provide themselves with such instructions, and follow them strictly.

**ORDERLY METHODS OF CHECKING.**—Where scale beams are not provided with recording devices, some other means should be used to assure the accuracy, and to prove the dependability of the record. And, in the case of scales equipped with automatic registers, a continuous detailed record of the weights, of each and every car, should show in the "weigh-book" in order that every draft, weighed thru the scale, will be recorded, and may readily be checked.

**SAFEGUARDING DELIVERY OF ALL GRAIN TO EACH CAR** must be based on the location of the scale with reference to the car, and on the character of the equipment used to convey the grain. Nevertheless, any well planned precautionary measures should take into account the possibility (no matter how remote) of grain going astray between scale and car, because of (a) possible leakage from the conveying machinery, and (b) possible accidental diversion of drafts, or wagon loads, to other cars, or to elevator bins. Similarly, precautionary measures should be taken to lessen any hazard there may be of grain, intended for house bins, being diverted to cars. In applying all such safeguards the value of the "weigh-book" record, confirming complete delivery to the car, should not be overlooked.

**METHODIZED RECORDS** should have as their basis, system, uniformity and completeness. They should be planned with the idea of assuring accuracy, and also, of establishing the correctness of the record of the weight and certain delivery of the grain to the car.

Finally, when an excessive weight difference is indicated by the out-turn weight, a thorough investigation of the shipping scale and grain handling equipment, and a careful examination of the weighing and loading records, should be made immediately. Also, prompt notice of such difference in weights, including all details in relation thereto, should be forwarded to the shipper's terminal representative in order that a similar investigation may be made, as early as possible, at the point where the out-turn weight was ascertained.

If the Weighing Department of the Board of Trade, of Chicago, can be of service to shippers, in matters pertaining to scales and weighing, it will be glad to render such service.

**OM**  
DEPENDABLE  
FIELD CORN - SWEET CORN  
SEED OATS - SEED BARLEY  
GARDEN SEED - GRASS SEED  
THE O & M SEED CO.  
GROWERS GREEN SPRINGS, OHIO

**CRABBS REYNOLDS TAYLOR CO.**  
CRAWFORDSVILLE, IND.

**GRAIN**  
Clover and Timothy Seeds  
Get in Touch With Us

We are in the market for  
all kinds of

**FARM SEEDS**

Send samples for highest bid  
to our nearest office:

SIoux CITY, IA. IOWA CITY, IA.  
NORFOLK, NEB. MANKATO, MINN.  
SIoux FALLS, S. D. CARROLL, IA.  
BILLINGS, MONT.

**MICHAEL-LEONARD SEED CO.**  
formerly Sioux City Seed Co.



Elevator Chimney Razed After Long Service



## Grain Carriers

**A. E. Staley Mfg. Co.** will be permitted by a re-opening of Ex Parte No. 104, terminal allowances, to present new evidence on operating conditions at the Staley plant.

**Omaha, Neb.**—The Interstate Commerce Commission has affirmed its former ruling against proposed increases in rates on grain from South Dakota and Minnesota points to Nebraska points.

**Washington, D. C.**—Grain and grain products were loaded into 28,781 cars during the week ended Apr. 9, compared with 29,241 in the corresponding week a year ago.—Ass'n of American Railroads.

In No. 27893 Examiner Brown proposes dismissal of the complaint by the Co-operative G. L. F. Mills against the C. B. & Q.'s \$1.06 rate per 100 lbs. on fish meal from Seattle, Wash., to Albany, N. Y.

**Robbery of freight trains** in transit in the United States and Canada resulted in payment of \$532,939 in claims during 1937, against \$688,792 in 1936 and \$841,736 in 1935 as reported by the Ass'n of American Railroads.

**Austin, Tex.**—A hearing was held by the Texas Railroad Commission here April 12 involving proposed charges for installation of grain doors at Fort Worth, Dallas, Houston, Galveston, and Amarillo. Other Texas points are not involved.

**Chicago, Springfield & St. Louis Railway Co.'s** supplement No. 12 to Tariff No. 39, Supplement No. 10 to Ill. C. C. No. 40, effective May 8, 1938, increases rates on grain and grain products from stations on the CS&StL Ry. to Alton and Springfield, Ill.

**Washington, D. C.**—The president of the C. & N. W. Ry. Co. told a senate com'te that railroads should be permitted to engage in trucking without the restrictions now imposed by the Interstate Commerce Commission in the Barker case, so they can displace trains with trucks and buses.

**Barge Line operations** for 115 miles on the Cape Fear River between Wilmington and Fayetteville, N. C., are provided for in H. R. 9073. Sec'y of War Woodring favors this government extension, and the Norfolk & Southern is opposed. The Government should get out of the transportation business.

**Fort William, Ont.**—Outbound navigation from Fort William and Port Arthur opened Apr. 12 when the Canadian steamers Winnipeg and City of Windsor sailed down the Kam river and out thru the ice fields in Thunder Bay to open water. The City of Windsor was loaded with grain for Montreal.

The Pettengill bill to relieve railroads of the handicap of the long and short haul clause would place them in the same position as their competitors, the motor carriers by highway and water carriers, neither of which are so restricted in rates, in the Motor Carrier Act nor pending waterway legislation.

Only 13 sailing vessels are competing this year in the annual grain race from southern Australian ports to Europe, and this romantic feature of shipping circles draws closer to a close. In 1921, 36 sailing vessels were in the race. By 1931 the number had been reduced to 26. The Swedish vessel, C. B. Pedersen, was lost last year in a collision. The Finnish vessel, Pamir, is out of the race.

**Omaha, Neb.**—Continuing its three-year fight for restoration of favorable grain transit and thru rate privileges, the Omaha Grain Exchange has filed with the Interstate Commerce Commission a petition asking that "permissive" transit privileges granted last July be made mandatory on the railroads in the Omaha territory. The railroads failed to act favorably under the "permissive" grant.

**Churchill, Man.**—Due to the light grain crop raised in Canada last year, Churchill as a grain port faces a complete shut-down this year for the first time since it was opened in 1931. Declared a leading shipping authority: "Churchill is not a commercial proposition for grain exports this year unless there is government intervention. This is not likely until there are carry-overs of wheat in Canada."

**Montreal, Que.**—The port of Montreal has adopted a new regulation imposing a charge of \$4 per 1,000 bus., formerly borne by ocean carriers, on owners of grain for outboard elevation. Protests have been filed by the Winnipeg Grain Exchange and the North American Export Ass'n in New York, and exporters are understood to have withdrawn offers of wheat for clearance thru Montreal because of the charge.

**Portland, Ore.**—Effective April 20, Oregon and Washington intrastate rail rates on grain and grain products were raised 5% in accord with the recent Interstate Commerce Commission general order on interstate rates. These decisions were handed down by the Public Utilities Commission of Oregon and the Washington Department of Public Works. Under these decisions, switching, demurrage and other railroad charges are subjected to a 10% increase.

**J. J. Pelley**, pres. of the Ass'n of American Railroads, says: "We've got to have more for what we do and pay less for what is done for us. A reduction of wages is necessary. If the labor unions would talk about a voluntary reduction, it would only be until times get better. If we are forced to use the labor act machinery, we will formally request a reduction." Expecting failure to obtain any immediate wage cut the railroad companies are about to ask the Interstate Commerce Commission for an emergency 5 per cent rate increase.

**Canadian v. United States grain rates** were debated in the Senate Apr. 8. Canadian grain rates are about 60 per cent of what they are in the United States. Under the Canadian policy of subsidy the Class I railroads in the United States could have handled all the grain free from 1923 to 1927, as well as flour, meal and live stock and have left \$403,332,826 more revenue than actually received. Railroad taxes in Canada average \$267 per mile and in the United States \$1,591 per mile. At the Canadian rate the taxes on U. S. railroads would have been \$330,000,000 less.

**Duluth, Minn.**—Steamer P. D. Block opened navigation from the lower lakes when it arrived at Duluth-Superior early in the evening of Apr. 13. The arrival, however, did not constitute "opening of navigation" under Board of Trade rules because regular cargo trip and hull insurance was not in force until Apr. 16. Boats are now arriving in steadily increasing numbers, reporting for grain cargoes under contract for delivery to U. S. or Canadian eastern ports. Bulk of the shipping is for export account. A million bushels were loaded out during the first week of navigation, and the elevators are holding 24,000,000 bus. more, most of which is under contract for shipment.—F. G. C.

## Highway Conference Hopes to Protect Trucks

A com'te of six from the National Highway Users Conference has recommended to the Splawn Com'te, a special com'te appointed by the President to search for a solution to the railway problem, a series of suggestions that have been made to help the railroads.

Trucking interests rejected some of the recommendations of the National Highway Users Conference com'te. Nevertheless these recommendations were included in the report to the Splawn Com'te, with notations of their unfavorable reception.

A proposal to amend the "Motor Carrier Act, 1935," so as to provide a "commodity clause," similar to that now contained in Part I, Section 1 (8), was rejected. This clause, if applied to carriers by truck, would prevent the truck owner from transporting, interstate, any article or commodity (other than timber and the manufactured products thereof) manufactured, mined or produced by it or under its authority, or in which it may have any interest, direct or indirect, except such articles or commodities as may be necessary and intended for its use in the conduct of its business by the carrier. This, of course, would strike at the rights and privileges of the private carrier by truck, including the farmer, in hauling his own products and supplies.

A proposal to amend the Motor Carrier Act "to make clear that any manufacturer or dealer making any charge directly or indirectly for transportation incidental to the delivery of



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WINCHESTER, IND.

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Winchester, Ind.

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Automatic, Oil Burning  
Direct Heat  
DRIER AND COOLER

*They're Profit Makers*

## HESS WARMING AND VENTILATING CO.

1211 SO. WESTERN AVENUE  
CHICAGO, ILLINOIS



goods which have been sold, shall be deemed to be a for-hire carrier and subject to the provisions of the Motor Carrier Act," was also rejected. This proposal in its original form would affect immediately all motor carriers of processed milk and gasoline, and other commercial firms making deliveries in their own vehicles.

Declares the National Highway Users Conference: "The private carrier by truck is 'up against it' whether he be farmer, merchant, or fleet operator, as is the little operator also. Most of these individuals seem not to appreciate how their rights and privileges to use their trucks on the highways in hauling their own products and supplies, and doing miscellaneous business, are being threatened by both state and federal laws and regulations. If private motor carriers are to be subjected to rate powers of regulatory commissions; if the Shreveport doctrine is to be imposed on the little operators; if the 'commodities clause' is to be invoked to prevent a person hauling his own stuff; if community hauling is to be handicapped because, incidentally or indirectly, there may be a charge for it; what is left for the private carrier or the little operator to do except to sell his truck and get off the highway?"

### Figuring the Rate Increase

J. S. Brown, manager of the Transportation Department of the Chicago Board of Trade, has given instructions that effective March 28, increase all of the interstate local rates, proportional rates and proportions (specifics) to Chicago as shown:

This readjustment is in accordance with the order of the Interstate Commerce Commission authorizing an increase of five per cent on products of agriculture.

The table of rates shown includes also the reshipping rates from Chicago and the joint thru rates from country stations to destinations east of and including the western termini (Buffalo, Pittsburgh, etc.). In most cases the increased joint thru rate is the same in amount as the combination on Chicago. However, in some cases the increased joint thru rate is one half cent or one cent less than the combination of the local rate to Chicago plus the reshipping rate from Chicago. Also, in some cases the increased joint thru rate exceeds the combination on Chicago by one-half cent or one cent.

As soon as feasible the joint thru rates to points east of and including the western termini (Buffalo, Pittsburgh, etc.) will be readjusted to be the same in amount as the combination of the specific to Chicago plus the reshipping or proportional rate from Chicago. Also, there will be restored the normal differential relationship between the various destination groups in eastern territory. It is uncertain at this time what, if any, differential relationship will be reestablished between grain and grain products.

Old	New	Old	New	Old	New
4	4 1/4	17	18	30	32
4 1/2	4 3/4	17 1/2	18	30 1/2	32
5	5 1/2	18	19	31	33
5 1/2	6	18 1/2	19	31 1/2	33
6	6 1/2	19	20	32	34
6 1/2	7	19 1/2	20	32 1/2	34
7	7 1/2	20	21	33	35
7 1/2	8	20 1/2	22	33 1/2	35
8	8 1/2	21	22	34	36
8 1/2	9	21 1/2	23	34 1/2	36
9	9 1/2	22	23	35	37
9 1/2	10	22 1/2	24	35 1/2	37
10	10 1/2	23	24	36	38
10 1/2	11	23 1/2	25	36 1/2	38
11	12	24	25	37	39
11 1/2	12	24 1/2	26	37 1/2	39
12	13	25	26	38	40
12 1/2	13	25 1/2	27	38 1/2	40
13	14	26	27	39	41
13 1/2	14	26 1/2	28	39 1/2	41
14	15	27	28	40	42
14 1/2	15	27 1/2	29	40 1/2	43
15	16	28	29	41	43
15 1/2	16	28 1/2	30	41 1/2	44
16	17	29	30	42	44
16 1/2	17	29 1/2	31		

### New Ex-Lake Grain Rates

Following are the ex-lake rates on grain from Buffalo and other United States lake ports as readjusted effective under the five per cent increase in cents per hundred pounds.

These ex-lake rates include charge of not exceeding one cent per bushel made by the elevators against the grain for elevation and transfer from lake vessels to cars, including 5 days' storage, reports J. S. Brown, manager of the Transportation Department of the Chicago Board of Trade.

On soybeans for export the wheat rates will apply.

To	Wheat	Corn	Oats	Barley
Boston ..... Dom.	21.67	21.79	22.13	22.08
Rockland, Me. .... Dom.	24.67	24.79	24.13	25.08
New York, Philadelphia, Baltimore ..... Dom.	19.67	19.79	21.13	20.08
Boston, New York, Norfolk. .... Exp.	11.17	11.29	12.63	13.08
Philadelphia, Baltimore ..... Exp.	10.67	10.79	12.13	13.08

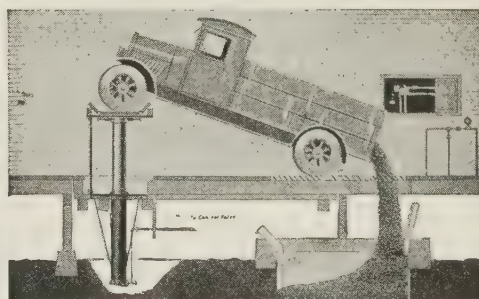
### Illinois Truck Length Law in Courts

A suit for an injunction to restrain the State of Illinois from enforcing the section of its traffic code limiting the lengths of tractor and semi-trailer trucks to 35 feet has been filed in the Circuit court.

Those bringing suit are the Automobile Shippers of Michigan, the S. & C. Transfer Co. of Illinois, the Association Transfer Co. of Missouri, the Dealers' Transfer Co. of Illinois, and the Cossens Transfer Co. of Illinois, all of which operate 40-foot vehicles.

Louisville, Ky.—Briefs on constitutionality of an alcohol tax unit regulation requiring reports on purchase or sale of malt and yeast over certain amounts were being prepared on order of Federal Judge Hamilton in a case involving the Holy Cross Mercantile Co., Holy Cross, Ky.—A. W. W.

## Economy **STRONG-SCOTT** Efficiency

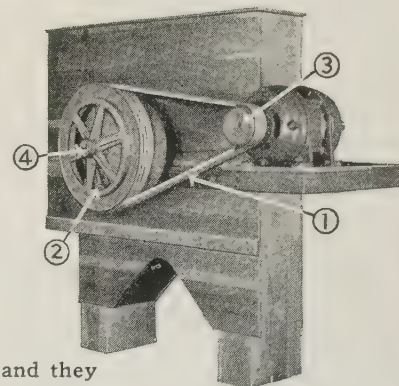


### Pneumatic Dump

It is the only vertical-lift dump that can be hung from the scale timbers. This means lower installation cost and, most important of all, no interference with correct weighing. Handles all trucks quickly, quietly and safely. Write for particulars.

### Head Drive

It's the ONLY head drive that will deliver so high a percentage of your motor's power to the head shaft. Note these features: The V-Belt drive (1) has been proved 99% efficient. The automatic Back Stop (2) can't fail and can't stick. Leg speed can be changed easily by changing (3) sheave on motor. Planetary gears. (4) in oil bath, 97% efficient.



### Superior Cups

D. P. They carry more than ordinary cups and they discharge all of the load.

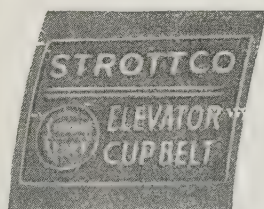


C. C. These cups are designed for unusually close spacing and higher speeds. If you need greater capacity and exceptional service use Superior C. C. Cups.



### Strotco Belting

An efficient, durable and moderately priced rubber covered belting. Assures high rate of power transmission and long life. The belting is non-stitched, seamless, and is made to give you more than your money's worth.



Everything for Every Mill, Elevator  
and Feed Plant

The Strong-Scott Mfg Co.  
Minneapolis Minn. Great Falls Mont.





# Feedstuffs

**Cincinnati, O.**—During March Cincinnati received 1,080 tons of feed and 737 tons of hay, compared with 1,260 and 2,508, respectively, in March, 1937.—Cincinnati Board of Trade.

**New York, N. Y.**—New York received 77 tons of millfeed during March, compared with 134 tons in March a year ago, and shipped 42 tons of millfeed. Feed shipments in March, 1937, were 282 tons of hay.—Produce Exchange.

**Washington, D. C.**—Brewers' dried grains output during March totaled 10,140 tons, increase of nearly 25% over February and a marked increase over the 9,860 tons produced during March, 1937. Shipments were 260 tons less than production.—Buro of Agricultural Economics.

**Seattle, Wash.**—The "Covered Wagon" (a special, chartered car) will leave Seattle at 4:20 p.m., May 12, to carry Washington delegates to the annual convention of the Oregon Feed Dealers Ass'n. The car arrives in Portland at 9:20 p.m. Send reservations to "On-to-Oregon" Com'te, Pacific Northwest Feed Ass'n.—Floyd Oles, mgr.

**Washington, D. C.**—Distillers dried grains output of 14,520 tons during March was about the same as for February but was much below the March output of 23,680 tons last year. Production for the 9 months ended March 31 totaled only 120,260 tons compared with 189,130 tons for the comparable period in 1936-37.—Buro of Agricultural Economics.

**Washington, D. C.**—Alfalfa meal production declined during March with output only 13,210 tons compared with 15,400 tons in February. This was much below March output last year of 19,700 tons. Production for the 10 months ended March 31 of 243,120 tons was smaller than 276,870 tons output for the comparable period last season.—Buro of Agricultural Economics.

The number of cattle on feed for market in the 11 corn belt states on April 1 was about 20 per cent larger than the small number on feed on April 1, 1937, according to the estimate of the Buro of Agricultural Economics. This increase was probably equivalent to about 200,000 head. The number on feed April 1 this year, while materially larger than on April 1 last, was much smaller than the number on the corresponding date in most years prior to 1934.

**Urbana, Ill.**—Speakers at the annual Swine Growers Day at the College of Agriculture, University of Illinois, contended no good can come from fermenting either a poor oat ration or a good ration with yeast before feeding to hogs. Yeast feeding trials developed no significant difference in the digestibility of fermented and unfermented rations. Rye pasture experiments are being continued in hopes of finding means to reduce the costs of pork production by lengthening the normal pasture season.

**Minneapolis, Minn.**—New members who have joined the Northwest Retail Feed Ass'n during the last 60 days include Pacific Grain Co. plants at Minneapolis, Hutchinson, and Fairfax; International Elevator Co., Perham; McCabe Bros. Co. at Wanda, Battle Lake, Lowry, and Argyle; Farmers Elevator Co., Kerkhoven; C. Roe Grain Co., Crookston; Green Lake Grain & Seed Co., Spicer; Farmers Independent Grain Co., Evansville; Bode's Feed Mill, Ceylon; C. A. Nachbar Co., Mankato; Hubbard & Palmer Co. at Mankato, Odin, and Vernon Center; Farmers Elevator Co., Inc., Stewartville, and Gopher Grain Co., St. Paul. all Minnesota points.

**Eugene, Ore.**—Willis Small, of Willis Small Feed Co. has been re-elected by members of the Eugene District to serve on the board of governors of the Oregon Feed Dealers Ass'n. He has served his district continuously on the board since organization of the ass'n.

## New Feed Trade Marks

"Turkey Builder" is trade mark 401,183 filed by General Mills, Inc., Minneapolis, Minn., for poultry feed.

"Red Sails" is trade mark 375,692 filed by the Charleston Milling & Produce Co., now known as Charleston Milling Co., Charleston, W. Va., for scratch feed.

"Lac-o-Lac" with a cross at each end, and inclosed in a rectangular border is trade mark 397,736, filed by E. R. Wood, doing business as The Mineralized Yeast Feed Co., Jefferson, Ia., for a livestock feed.

"Larro 41%" with a suitable semi-circular background and a picture of a boll of cotton, is trade mark 401,182, filed by the General Mills, Inc., Minneapolis, Minn., for feeds for domestic animals, especially dairy feeds.

"Vitolol" inclosed in a double circle is trade mark 400,143, filed by Vitolol, Inc., New York, N. Y., for a compound incorporating molasses, carrying vitamins for use in animal feeds and as a supplement to animal feed mixtures.

A square border design, with a small, square picture of a rooster's head in each corner are the parts of trade mark 381,504, filed by Paul A. Watson, doing business as Oak Park Creamery, Pasadena, Calif., for animal and poultry feeds.

"TBC" in a diamond shaped, horizontal design is trade mark 401,999, filed by Charles A. Gerber, doing business as Gerber's Animal Food, Bartlett, Ill., for a food, consisting principally of bread crumbs, for fur bearing animals and chickens.

## Hogs Require Minerals

How much mineral does a hog require? R. G. Knox, in *Sci. Agri.* sets the requirements of both calcium and phosphorus in a swine ration at approximately .3% each, and declares that 70 per cent of the calcium in a feed is utilized by the hog. He adds that a sow will store 9-12 mg. daily of iron during the last three weeks of pregnancy.

The iodine requirement he establishes at a little less than 10 mg. daily per animal, and the daily salt requirement is set at .03-.12 ounces.

## Manitoba Grown Corn Well Supplied with Vitamin A

Both Manitoba Yellow and Manitoba Red corn proved fully equal to American Yellow in vitamin A content, in experiments conducted by M. C. Herner, as reported in *Chemical Abstracts*. Twenty per cent of either of these varieties in a poultry ration supplied adequate vitamin A for strong growth.

The vitamin A requirements were determined by feeding the corn rations at several levels instead of by biological assay. Manitoba Red corn proved slightly lower in protein than the other two varieties.

## Peanut Hay Makes Good Dairy Roughage

Peanut hay came out on top when compared with soybean hay in three double reversal feeding trials with milking cows at the North Carolina experiment station. Each trial involved three 30-day experimental periods. Hay was the only variable in a diet of hay, beet pulp, and a grain mixture. The peanut hay was of good quality, and was compared in each instance with a rather fine stemmed Laredo soybean hay of similar quality.

While the cows refused less than 1% of the peanut hay, they were a bit more choicer about the soybean hay, refusing to eat 4.8% of it.

In each of the trials the peanut hay fed groups averaged slightly higher in milk and butterfat production, required less hay, beet pulp, and grain per unit of production, and gained a little more in live weight than the soybean hay fed groups.

C. D. Grinnells and J. L. Moore, who report the experiment, conclude that good peanut hay is fully equal to soybean hay of similar quality for feeding dairy cows, and that its value as a legume roughage justifies more care in handling and storage than it generally receives.

## Hay Influences Calves' Use of Concentrates

Ground oats act concurrently as a mixture of roughage and concentrate, when fed to dairy calves with skimmilk, according to experiments with Ayrshire calves reported by Lauri Paloheimo in *Bierdermanns Zentralblatt*.

Paloheimo's report says that when skimmilk with cod liver oil was used as the sole diet for the calves the volume of the food had an influence on the growth of the animals, the harmful effect of no roughage not appearing until the second month when the volume of skimmilk plus cod liver oil was small, and not until the fourth month when the ration was larger.

Omission of hay from the diet of the calves increased their consumption of ground oats, but had no effect on the amount of corn meal eaten, and the calves grew as well on ground oats as they did when hay was added to the diet. Increases in the amount of hay fed reduced the need for ground oats, tho it had little effect on the volume of corn meal consumed.

Where all constituents of the ration were fed free choice in as much quantity as the calves would consume, the amount of hay eaten remained about the same regardless of whether ground oats or corn meal was used as a concentrate.

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## Mixed Feeds Show Gains in New York

Commercial mixed feeds have shown a gain in New York state, according to April 1 figures released by the state's Department of Agriculture & Markets. The seven year record of the percentage of home grown and purchased grain used and the percentage of commercial mixed feeds and other feeds bought follow:

	Home	Grains Purchased	Commercial mixed	Other purchased
1932	22%	4%	51%	23%
1933	26	8	36	30
1934	11	8	50	31
1935	17	4	57	22
1936	18	4	63	15
1937	12	3	66	19
1938	12	4	68	16

Home grown and purchased grains include corn, oats, barley, buckwheat, wheat, rye, both whole and ground. Only a small amount of soybean meal from home grown soybeans is reported.

## Yeast Corrects Pellagra-Producing Diet

Existing confusion over the food factors that correct pellagra and blacktongue led to experiments by Thomas W. Birch, Harriette Chick and Charles J. Martin, as reported in the *Biochemical Journal*. Says a brief review of the experiment:

"Pigs were used rather than smaller animals because they were omnivorous, easy to feed and their digestive arrangements were similar to those of the dog and of man.

"A diet similar to those producing blacktongue and modeled after pellagra-producing diets was fed to young, weaning pigs. They became ill with diarrhea in 5-10 weeks, showed a progressive anemia and died unless the diet was changed. The pigs grew satisfactorily on this diet when 4% or 8% dried yeast was added. Dried yeast or autoclaved yeast extract effected dramatic cures of animals on the unmodified diet. Lactoflavin had no effect on sick animals.

"The substitution of a mixture of whole wheat and whole barley for the corn in the diet made it just suitable. The unmodified diet was satisfactory for young rats. The corn in the diet is undoubtedly lacking in some constituent of the vitamin B<sub>2</sub> complex which is present in wheat and barley."

## North Carolina Regulates Feeds

New feed rules and regulations adopted by the North Carolina Board of Agriculture became effective April 1. These rules go a step beyond the regulations in most states, in that they seek to set the maximums and minimums of protein fat and fibre that a feed may contain, instead of simply requiring that the feeds be honestly labeled to reflect the true contents of the container. The limits listed are:

Cow and dairy feeds—15% minimum protein; 3% minimum fat; 16% maximum fibre.

Hog feeds—14% minimum protein; 3.5% minimum fat; 7% maximum fibre.

All mash poultry ration—15% minimum protein; 4% minimum fat; 7% maximum crude fibre.

Scratch grains—9% minimum protein; 2.5% minimum fat; 5% maximum fibre.

Maximum fibre standards have also been set for wheat mill feeds, such as 'Red Dog,' middlings, shorts, and other such feeds.

Under the revised feed regulations, metal fasteners cannot be used to attach a feed tag or label to bags or container.

The general idea, insists D. S. Coltrane, assistant to the Commissioner of Agriculture, is to require manufacturers to build their feeds up to a standard and eliminate the fibrous filler that has been among the leading ingredients in "cheap" feeds.

## Speakers at Oregon Convention

Six of the speakers who will appear on the program for the annual convention of the Oregon Feed Dealers Ass'n, at the Multnomah Hotel, Portland, May 13, have been announced. They are:

George L. Baker, former mayor of Portland.  
R. B. Ambrose, sales promotional manager of the Frigidaire Corp.

C. W. Norton, a leader in Pacific Coast dairy and poultry circles.

Noel Bennion, extension poultryman, Oregon State College.

E. B. MacNaughton, bank president and student of economics.

Dr. Anderson, newly elected president of the University of Redlands.

## Cereal Diets Cause Rickets

In studies covering the production of rickets thru feeding of cereals, M. de Bruin and J. Bouman reported in *Z. Vitaminforsch.* that:

"Oats are more rachitogenic than rice; this difference is not due to differences in organic phosphorus, magnesium or sodium. The rachitogenic activity of both cereals in not affected by removal of their Et<sub>2</sub>O extract or their alcohol extract but is markedly decreased by addition of an alcohol extract of barley. Occurrence of rickets is lessened by extraction of the oats with H<sub>2</sub>O and is increased by addition of this aqueous extract of oats to the rice ration. The active principle of the oats is not precipitated from its aqueous solution by addition of alcohol. Addition of salt to these rations has no antirachitic action."

## Iowa Feed Law Requires Labeling "Sugars"

Iowa's feed law requires that the labels on molasses feeds show the percentage of total sugars, declares a bulletin of the American Feed Manufacturers Ass'n, recently mailed to members. The statement reads:

"Section 3114 of the Iowa Feed Law, which is the section covering labeling, provides for certain declarations of constituent elements of feeds and further provides as follows: 'and in case of feeding molasses the per cent of total sugars.' We have always considered that this clause applied merely to feeding molasses sold as such and not to molasses used as an ingredient in mixed feeds. However, the state chemistry department holds otherwise and after considerable correspondence with them in which our views were very clearly set forth, we have a letter stating that under this section the percentage of total sugars must be stated in feeds which contain molasses as an ingredient, and also in molasses sold by itself. We do not approve of this ruling and the matter will be

referred to our committee in charge of these matters for their consideration as to what further action may be taken, but in the meantime the ruling stands and members are advised to be governed accordingly."

## Cod Liver Oil Successfully Fed to Dairy Calves

Cod liver oil was successfully fed to dairy calves from birth to six or nine months of age as a supplement to a diet of skim milk, hay, and grain, in experiments in Cornell University's Laboratory of Animal Nutrition, as reported by George K. Davis, and L. A. Maynard. The cod liver oil was fed at different levels, up to 0.7 gram per kilo, with no marked ill effects.

When the calves were killed for post-mortem study no gross changes could be found that indicated injury from cod liver oil. Histological examination of the muscles showed slight dystrophic changes in some of the animals, particularly those fed the higher levels of the oil; but the lesions were of a very minor character, compared with those previously found in similar experiments with other herbivorous domestic animals.

"The results suggest," conclude the authors, "that cod liver oil can be fed to dairy calves in sufficient quantity to supply vitamin D without significant injury."

## Yeast in Calf Meal Increases Growth

Sixty-five calves were used by Paul E. Newman and E. S. Savage to study two calf starter formulas at Cornell University. When the experiment was over, the experimenters concluded:

The dry calf starter method consistently produced calves above normal in weight and of desirable body and skeletal development.

The use of dried brewers' yeast and cereal yeast feed in the dry calf starter formulas resulted in greater growth and body development.

The total digestible nutrient requirement per unit gain in weight was lower for the yeast-containing calf starters than for the others.

The previous level of 20 per cent dried skim milk can be reduced to 10 per cent without decreasing the effectiveness of the calf starter when yeast or a combination of yeast and soybean oil meal is used to keep the protein level the same.

Using a level of 30 per cent dried skim milk lowered the palatability of the starter and resulted in slower growth.

Pelleting the two formulas studied decreased the consumption of the calf starter by young calves and resulted in slightly slower growth.

A high correlation exists between the size of the egg and the size of the chick at hatching time.

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# Poultry Feeds and Feeding

## Baby Chick Sales Increase

Sales of baby chicks have shown a big increase this year over a year ago, according to the April 1 report of the Bureau of Agricultural Economics. Says the report:

"The number of young chicks of this year's hatchings on hand on April 1 shows a big increase over the same date a year ago.

"The reported average of 42 chicks per farm flock is the highest average number since 1927, the first year on record, when an average of 43.5 chicks per flock was reported. This year's average is 29% above last year's low figure of 32.6 and is 22% above the April average of 34.3 for the 10 years 1927-36. It is 35% above the average of 31.2 for the 5 years 1932-36, when the average level of chicken production was low."

## Cottonseed Meal Proves Successful in Chick Starter

Cottonseed meal has been used successfully in a chick starting ration by R. C. Ringrose and C. L. Morgan at the South Carolina Agricultural Experiment Station. They used a variety of rations in their experiments with White Leghorn chicks, and concluded "that cottonseed meal may be used satisfactorily in a starting ration for chicks when properly supplemented."

The series of duplicate experiments used prime quality of 41% cottonseed meal to replace up to three-fourths of the meat scrap protein. Mineral additions were necessary and 7.5% of dried whey and 5% of dehydrated alfalfa leaf meal were used as sources of riboflavin.

Growth on these rations equaled the growth on the control ration, which was composed of yellow corn meal, wheat middlings, meat scrap, dried whey and alfalfa meal.

## Added Ergosterol Does Not Improve Cod Liver Oil

The efficiency of cod liver oil alone, and cod liver oil mixed with irradiated ergosterol, as a source of vitamin D for confined laying hens, was compared in an experiment at the Agricultural Research Center, Beltsville, Md., in 1933-34, reported by Ralph B. Nestler.

Six pens of crossbred pullets, the progeny of a mating of Rhode Island Red males with Barred Plymouth Rock females, were used. The birds were kept in strict confinement without access to direct sunlight. These six pens received the following vitamin D supplement: 1, 2, and 8 per cent of cod liver oil in the first three pens, and 1, 2, and 8 per cent of cod liver oil supplemented in each case by 0.5 per cent of irradiated ergosterol 160 D in the last three pens. A phosphorus level of 1.2 per cent and a calcium level of 3 per cent were maintained thruout the experiment.

A mixture of 0.5 per cent of irradiated ergosterol 160 D with 1, 2, and 8 per cent, respectively, of cod liver oil in the diet of laying hens showed no superiority over the same quantities of cod liver oil without the addition of irradiated ergosterol.

The relatively high levels of vitamin D produced by combining cod liver oil at the 1 and 2 per cent levels with about four times the quantity of irradiated ergosterol necessary for laying chickens produced no deleterious effects on the hens or their eggs.

Cod liver oil at the 8 per cent level, whether supplemented with irradiated ergosterol or not, had a markedly deleterious effect on the production, average weight, total weight, and hatchability of the eggs; weight of the yolks; and the consumption of feed. It also caused the color of the yolks to be much lighter than those

from birds receiving lower levels of cod liver oil. However, it had no appreciable effect on the other items studied.

## Baby Chicks Need Vitamin G to Grow

Vitamin G is closely related with growth and the requirement for growth is much greater than the requirement for maintenance, conclude G. F. Heuser, H. S. Wilgus and L. C. Norris from their experiments with Single Comb White Leghorns at Cornell University. Growing birds need the greatest amount of vitamin G per unit of gain.

Assuming normal growth and food consumption to supply the necessary amounts of vitamin G for White Leghorn chicks, the data they accumulated shows that the ration should contain approximately the following amounts of vitamin G per 100 grams of feed for the second to the eighth weeks, respectively: 350, 290, 240, 200, 160, 130, 100.

The increase in the amount of food consumed, of course, gives each bird an increasing total number of units of vitamin G each week until five weeks of age, after which a decrease occurs until the eighth week.

## Sunlight Needed for Normal Growth of Chicks Fed Sulphur

Successful prevention of coccidiosis thru feeding baby chicks as much as 2% of flowers of sulphur for as many as 10 months, the chicks having access to direct sunlight, led C. E. Holmes, H. J. Deobald and C. A. Herrick into further experiments with sulphur feeding at the University of Wisconsin. The experiment grew out of suggestions from earlier experiments that continued feeding of large amounts of sulphur (5% or more) may be conducive to rickets when the chicks are dependent upon cod liver oil for their vitamin D.

A total of 1,023 chicks were used in the tests to discover the relationship between sulphur and rickets in the absence of sunlight. The conclusions are summarized by the experimenters as:

"When no addition of sulphur was made to the basal ration cod liver oil of the quality used in the first six trials (175-225 U.S.P. units vitamin D per gram) gave normal growth and bone ash if used at from 0.5 to 1% of the ration.

"When the ration contained 2, 5, or 10% granular sulphur 'sulphur rickets' resulted when 0.5 or 1% cod liver oil was fed.

"When the ration contained 2% wettable sulphur and .5% cod liver oil, rickets resulted. Rickets resulted when from 2 to 5% flowers of sulphur was fed with 1% of cod liver oil.

"When the ration contained 2% cod liver oil the bone ash was increased to normal or near normal levels even tho 5% flowers of sulphur or 5% granular sulphur was fed. But the retardation in growth was nearly as great as when .5 and 1% cod liver oil was fed to groups receiving sulphur.

"If chicks are fed 2% or more of granular sulphur, wettable sulphur, or flowers of sulphur and are entirely dependent upon cod liver oil of the quality tested in these trials rickets is quite likely to develop."

## High Producing Hens Use More Calcium

High egg production does not necessarily cause a loss of calcium from the system of a hen, if a supply of this element is kept available before her in usable form, declare C. L. Morgan and J. H. Mitchell of the Department of Poultry Husbandry, South Carolina Agricultural Experiment Station, reviewing experiments at that station.

The ability of a hen to utilize calcium, they prove is an individual characteristic. High producing hens are able not only to consume greater amounts of calcium, but utilize a great amount of the quantity they consume.

Their studies showed that during the early laying period a pullet is in negative calcium balance. After a period of negative balance she may become positive without change in the rate of laying. The return to a positive calcium balance is often accompanied by a reduction in the amount of egg shell, which appears to be caused by exhaustion of previously stored reserves of this element and the arousing of a need on the part of the bird for greater amounts of calcium to maintain minimum requirements in her system.

Egg production and molt showed a greater relationship to the maintenance of body weight than calcium balance, but inability to consume and utilize sufficient calcium to maintain a positive balance caused laying to stop.

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# Feeding for Eggs

C. W. Carrick of Purdue university gives the following as a simple economical ration:

Grain—	Lbs.
Whole yellow corn .....	500
Mash—	
Wheat bran .....	200
Wheat middlings .....	200
Meat scraps .....	90

Each evening, an hour before roosting time, feed about 12 pounds corn per 100 general purpose fowls (Rocks, Reds, etc.) or 10 pounds per 100 light fowls (Leghorns). Keep mash, oyster shells, and water before fowls at all times. Give fowls access to range on all afternoons during fall and winter regardless of weather and all day in other seasons.

When mixing the mash it is important to measure the mash ingredients by weight instead of bulk, but a feed pail can be marked to indicate the amounts of grain corresponding to weights and its use will be accurate enough without weighing out the grain each day.

**Condensed Buttermilk Improved this Ration.**—Two and one-half pounds of condensed buttermilk fed daily, in paste form to each 100 fowls, was beneficial with the above ration and the one below with ground oats and wheat, but has not been tried with other rations. When milk is fed at this rate 70 to 80 pounds of meat scraps are enough.

**A Mash with Ground Oats and Wheat.**—If bran and middlings are more expensive than ground wheat and ground oats the mash formula above may be replaced by 200 pounds of ground oats, 200 ground wheat, and 100 meat scraps, or instead of the 100 pounds of meat scraps one may use 80 pounds of ground soybean, 40 meat scraps, 20 steamed bone meal, and 5 salt. Fowls tested on these rations had access to a good grass range.

**A Mash with Ground Wheat.**—When prices justify, the mash may consist of 350 pounds of ground wheat, 90 meat scraps and 60 alfalfa leaf meal. This substitution of ground wheat for bran and middlings proved to be successful, but one should not conclude that ground wheat may be satisfactorily substituted for bran and middlings in any ration.

**"Big Five" Mash Popular.**—A popular mash formula, known as the "Big Five," consists of 100 pounds each of ground yellow corn, ground oats, wheat bran, wheat middlings, and meat scraps. It may be fed with corn or other grains as indicated for the ration given on page 3.

**Rations with Ground Soybeans and Soybean Oil Meal.**—When one has soybeans with a low market price or when soybean oil meal is relatively low in cost, a ration with the following formula may be practical:

Grain—	Lbs.
Whole yellow corn .....	200
Wheat .....	200
Oats .....	100
Mash—	
Wheat bran .....	100
Wheat middlings .....	100
Soybean oil meal or ground soybeans .....	90
Ground limestone .....	11
Steamed bone meal .....	10
Salt .....	7

Feed daily about 14 pounds grain per 100 general purpose fowls or 12 pounds for Leghorns. Keep mash, oyster shell, and water before fowls at all times. Give fowls access to range on all afternoons in fall and winter.

It is not necessary to mix the grains. For instance, in the formula just given, 6 pounds of corn, 6 of wheat, and 3 of oats may be fed separately each evening to 100 general purpose fowls or one grain may be fed in the morning and the others in the evening.

Soybean products vary in protein content. The formulas assume 40 per cent protein in these products; if they contain less, amounts should be increased accordingly. Soybeans may become rancid if ground very far in advance of time needed.

**Substitution of Milk, Meat Scraps, and Tankage.**—In the ration just given for soybean products one may omit the soybean product and minerals and use either 70 pounds of meat scraps, or 60 pounds of feeder tankage (60 per cent protein), or all the liquid skim-milk the fowls will consume when no water is given—usually three gallons or more per day per 100 fowls.

**Several Nutrients Are Necessary.**—Carbohydrates and fats supply heat and energy for the hen and make fat in the egg yolk. Proteins must be supplied from the feeds since the chicken cannot make them from other nutrients. When digested, proteins break down into substances called amino acids, and certain of these are absolutely necessary for egg production. The kind and quantity of these amino acids determine the nutritional value of the protein in an ingredient. There are many proteins and each of our common feeds usually contains several of them. Proteins vary considerably in quality, so that the mere amount of proteins in the ration is not necessarily a guide to its value. Unfortunately, the quality of protein cannot be very well determined by chemical methods, but feeding experiments are necessary. Protein concentrates that work satisfactorily in certain amounts with a given combination of feeds are not necessarily satisfactory in the same amount for other combinations of feeds. Hence it is important to use the amounts and kinds specified in the formulas, which have been determined by feeding experiments.

**Egg Shell Material.**—The laying hen needs some minerals in her feed, the largest demand being for calcium carbonate for egg shell formation. This is well supplied by either oyster shell or limestone if the limestone contains 95 per cent calcium carbonate. There is no evidence that minerals need to be added to the laying ration, except where vegetable protein concentrates are used, when calcium, phosphorus, and salt seem necessary. Actual harm may result if minerals are added when not needed. Meat scraps contain considerable calcium, phosphorus, and salt. It seems unnecessary to supply other minerals when rations contain as much as five per cent of meat scraps. Hard grit has not been shown necessary for grinding purposes, but it costs little and does no harm.

**Certain Vitamins Necessary for Layers.**—For good egg production and hatchability it is essential to supply an abundance of vitamin A—found in yellow corn, but lacking in white corn, wheat, oats and other white grains. It is usually associated with green coloring matter in green leaves such as alfalfa, clover, and grass. White cabbage, mangel beets, and turnip roots have very little vitamin A. Alfalfa hay may be fed in a wire rack in winter when range pasture is poor, or alfalfa leaf meal may be added to the ration at the rate of three to five per cent in addition to the yellow corn fed, although we have had excellent egg production and hatchability when half the ration consisted of whole yellow corn and only a bare yard was given for range.

Vitamin D, the "sunshine vitamin," must be adequately supplied if good egg production and hatchability are to be obtained. Giving the layers access to out-of-doors where they can get direct rays of the sunshine is a cheap and efficient way of supplying this vitamin. During the fall and winter flocks should have access to the out-of-doors on all afternoons, and all day during the spring and summer. Even when the weather is severely cold the fowls will go out some, and when snow interferes it may be shoveled away from the chicken house to give the hens their sun bath. Cinders or gravel placed in front of the chicken house hasten the melting of snow and provide drainage. If the eggs are collected at noon in bad

weather and the hens then turned out, few dirty eggs result. Fowls given a chance to get outside the house each day keep accustomed to the cold.

Where conditions, such as disease-infested soil, make range impractical one may substitute for the sunshine some source of vitamin D, such as tested cod liver oil, cod liver oil stearin, sardine oil, or some concentrated extract from some of these products. Their choice is largely a matter of their cost, on the basis of one to two per cent of cod liver oil in the ration, since this is about the amount that needs to be supplied. Where the fowls had outside conditions, experiments have shown that there is no gain from providing additional vitamin D, even in the winter. There seems to be no convincing evidence that confining layers during the winter is better practice

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than giving them access to out-of-doors part of the day, when results are measured in terms of profits.

There are several other vitamins which chickens need, but ordinary feeds appear to supply an abundance of them and it is not necessary to purchase special supplements that supply only more of what is already adequately supplied.

## Poultrymen Urged to Fight Fish Meal Import Tax

Poultrymen in the eastern and northeastern states have been urged to lodge vigorous protests with their congressmen and senators against passage of the McAdoo provision in the 1938 tax bill for a tax of \$10 per ton on imported fish meal.

This McAdoo amendment was included in H. R. 9682 when it passed the Senate on April 9, but was not included in the tax revision bill as it passed the House. The bill is now in Conference Com'te, where poultrymen hope the fish meal tax may be rejected.

The McAdoo fish meal tax equals 25% of the present value of imported fish meal, contend the poultrymen, and would increase the price of the 70,000 tons of fish meal that must annually be imported to supply the domestic demand. This would increase the costs for poultry feeds containing fish meal, and increase the price of competitive feeding-stuffs.

Heavy import duties on fish meal and cod liver oil, and domestic subsidization of grain farmers, both work to increase the cost of poultry producers, without compensating increases in prices available for poultry products. Since feed constitutes 50% of their costs, poultrymen feel justified in protesting both forms of taxation.

## Imports and Exports of Feeds

Imports and exports of feedstuffs during February and during the 2 months ending February, 1938, compared with the like periods of 1937, as reported by the Bureau of Foreign and Domestic Commerce, were as follows, in tons of 2,240 lbs., except where noted otherwise:

	IMPORTS			
	February 1938	February 1937	2 mos. ending Feb. 1938	2 mos. ending Feb. 1937
Hay*	3,253	24,242	6,612	44,801
Coconut cake†	6,266,537	27,277,485	12,478,474	37,218,912
Soybean cake†	1,027,600	22,116,387	3,224,402	30,911,154
Cottonseed cake†	27,500	4,848,936	887,500	9,198,346
Linseed cake†	386,000	3,593,001	1,286,000	6,129,001
All other cake†	1,715,000	5,265,741	3,781,418	6,439,311
Wheat fds.*	1,590	39,436	3,968	69,840
Beet pulp*	5,468	11,148	7,755	19,352
Tankage	2,817	2,677	3,919	5,528
Fish scrap	3,013	6,474	7,184	12,992
	EXPORTS			
	February 1938	February 1937	2 mos. ending Feb. 1938	2 mos. ending Feb. 1937
Hay	11,582	140	36,100	221
Cottonseed cake	8,417	2	14,678	4
Linseed cake	18,762	17,243	38,258	32,373
Other oil cake	.....	177	25	204
Cottonseed meal	1,143	285	6,318	719
Linseed meal	2,219	956	3,000	1,660
Other oilcake meal	3,331	608	9,537	1,581
Fish meal	6	21	271	74
Mxd. dairy fds. and poultry feeds	579	280	1,051	523
Oyster shells	2,267	2,282	6,457	7,253
Other prepd. and mixed feeds	238	52	418	120
Other feed bran	2,498	483	3,840	696
Kafir, milo, bus.	35,409	1,179	149,263	1,179

\*2,000-lb. tons. †Pounds.

## Hans' Poultry Club Develops Trade

Hans Halverson, feed man of Humboldt, Ia., is continuing again this season the Hans' Poultry Club he organized for boys and girls of Humboldt county several years ago.

Under the Club rules the membership is limited to 100 boys and girls between the ages of 11 and 15 years, and to one member from a family.

If an application for membership is accepted the member is presented with 30 baby chicks and 10 pounds of chick starting feed in May, the 100 members being given 3,000 baby chicks, and a half ton of chick starter.

Each member is charged with the duty of caring for the baby chicks thru the season. Before the Holidays each must pay his dues to Mr. Halverson, a charge of five cockerels. The rest of the birds are the property of the recipient.

Out of the dues Mr. Halverson creates a fund from which several cash prizes are awarded for excellence in poultry production.

## Northwest Feed Ass'n Schedules Prominent Speakers

May 8, 9 and 10 are the dates for the 6th annual convention of the Northwest Retail Feed Ass'n at the Nicollet hotel, Minneapolis, Minn.

Sunday, the 8th, will be given over to a grain grading school at which the attendance will be limited to 50 due to the number of instructors available. The Federal Grain Supervisor at Minneapolis will have charge. Most of the day will be devoted to demonstrations and actual practice for the students in running and testing samples of barley, corn and oats. Admission by reservation card.

Monday, the 9th, will see two regular sessions of the convention to which all are welcome. The annual banquet in the evening will enjoy entertainment supplied by the wholesale, jobbing and manufacturing trade of Minneapolis. Visiting ladies will be entertained at a luncheon and bridge party in the afternoon, and will enjoy the banquet in the evening.

Tuesday, the 10th, will see the last session of the convention, when ass'n business will be conducted and officers elected for another year.

Six prominent grain and feed men, merchandising experts, feeding, and legal authorities are scheduled for addresses on the program. They are:

Otto F. Bast, Minneapolis, veteran grain man and pres. of the Grain & Feed Dealers National Ass'n, who will show how recent federal legislation affects the grain and feed dealer.

George Ghostley, Anoka, Minn., poultry producer who trap-nets 10,000 hens and operates a 150,000 egg capacity hatchery.

Charles H. Van Horssen, head of the commercial feed department of General Mills, who is loaded with merchandising experience and ideas.

Tom G. Dyer, Des Moines, who has novel ideas as to who really are a feed and grain man's competitors.

Herbert F. Horner, Minneapolis grain and feed legal light, who will discuss possible legal steps to curb itinerant truck competition.

Dr. W. E. Peterson, University Farm, one of the staff of the dairy husbandry division, who will conduct a regular school on dairy feeds and feeding.

Washington, D. C.—Drying corn does not constitute a manipulation of the grain within the meaning of the tariff says a ruling by the Customs Bureau in a Mobile, Ala., case. Due allowance for excess moisture in imported corn may be taken when suitable application is made for such credit in the duties on imported corn.

## Washington Attaches Responsibility for Tagging Feeds

R. E. White, Supervisor of the Division of Feeds, Fertilizers and Livestock Remedies, of the Department of Agriculture of the State of Washington, has issued orders relating to the tagging and registration of ingredients commonly called "concentrates," "minerals," or "medicines," used as feeds for domestic animals, as follows:

**Order No. 260:** Materials or products other than those exempted in Section 13, Chapter 37, Laws of 1937, used in any manner as feed for domestic animals in its original or unmixed form and commonly known as "concentrates," "minerals," or "medicines" shall be registered and tagged in compliance with Chapter 37, Laws of 1937, before being sold, offered for sale or distributed in its original or unmixed form to the consumer in the State of Washington.

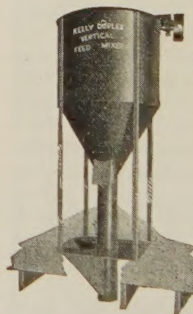
Any person selling, offering for sale or distributing any product described herein whether he be the manufacturer, importer, mixer, distributor, agent or vendor shall be responsible for the registration and tagging of the same as required by Chapter 37, Laws of 1937, before being sold, offered for sale or distributed in its original or unmixed form to the consumer in the State of Washington.

**Order No. 262:** "Pea meal" is defined as a product composed solely of ground whole peas, either screenings, tailings or field run, and shall not contain any foreign matter.

"Pea products meal" or "pea blend" is defined as a product composed of a blend of pea bran as designated herein and pea meal as designated herein.

"Pea bran" is defined as a product composed of pea pods, scalplings, hulls and other offal as obtained from processing and cleaning field run peas and shall not contain any pea meal other than that which is resultant of the processing operation.

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## GRAIN & FEED JOURNALS Consolidated

### Talking the Millers' Language

By ROY E. BROWNE, assistant superintendent, Elevator A, Kansas City, Kan., before Society of Grain Superintendents, Kansas City, Mo.

A few years ago when you superintendents loaded a car of grain the inspector climbed up into the car with his testing bucket and pulled the grain over into the bucket with his hands, struck it off with the beam and weighed it; took some of the grain in his hand, looked at it and announced the grade. You paid no attention to dockage, fine wheat or protein.

What a difference from the present method of arriving at a grade. You binned your wheat by test and grade. Then later you binned it by color test and grade and you gave each color a name. The buyer learned the name and bought most of your wheat by sample. Then someone discovered protein and so protein was added to your binning and you blended for protein as well as test and grade. The terminal elevators in their attempts to keep up with the mill wheat buyer discovered some of the secrets of what kind of wheat the miller wants and why.

There entered into his vocabulary of wants and requirements along with the protein, the new term "ash" and now comes baketests or the chemist's full analysis of the wheat in the finished loaf. If you will notice most elevator superintendents are gray-headed, brought on by rasseling with protein, ash, color, etc. We are wondering what it will do to you when you sell all your wheat by baketests and you men can expect this in the near future and you will of necessity carry on your bin, not only grade test, protein and ash, but also the size or volume of the loaf, the bromated loaf, the texture of the bread, the color of the flour, etc., which means your elevator will have a miniature mill and baking oven. Our advice to you men is to discourage this step in the grain trade.

**Meeting Mill Requirements.**—When the miller wants certain kinds of wheat to

strengthen his stock of wheat, he starts in by asking you for samples from which he makes baketests. You may submit to him samples of wheat which may not be what he wants at this particular time and you lose the sale. Yet, you may have an abundance of the kind of wheat he wants. He may in this particular case be wanting low ash for which he would be willing to pay a premium or per chance he may want a certain kind of wheat to bolster the texture of the loaf, or to give his "plus loaf" additional kick. If the grain firms or elevator superintendents talked his language, then he could tell us what he wanted and we could give it to him. There are a great many things involved in this departure from regular procedure. The millers' wants are controlled by the bakers' demands. It will mean it will be necessary for the grain buyer to discover from which territory low ash is coming for each particular year as the mill buyer does and has been doing for the past 15 years. This means a greater rivalry for certain wheats and other kinds of wheats will be a drug on the market. This means you will be blending then not only for the test and grade and protein, but also for ash, volume, texture, etc.

We haven't touched on the gassing power or color of crust or crumb.

We will then discover the effect rye has on color, or what effect dead wheat has on the volume, or the effects of heat-damaged kernels on texture or the (what kind) of sprouted wheat to use for the bromated loaf.

Just as sure as protein has entered into your vocabulary, the terms, ash, volume, color, etc., are coming.

A corn belt farmer who runs his 160-acre farm the way the A. A. A. wants him to will be paid \$203. Compliance means cutting down the acreage of corn, wheat, oats, soybeans, potatoes, mangels or grain sorghums harvested as grain or silage, and seeding grass. Clover and alfalfa of foreign origin, other than Canadian, can not earn benefits if seeded.

### Feed Prices

The following table shows the closing bid price each week for May futures of standard bran and gray shorts, spot cottonseed meal, soybean meal and No. 1 fine ground alfalfa meal, in dollars per ton and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

	Minneapolis		Kansas City	
	Bran	Midds	Bran	Shorts
Jan. 8.....	21.00	21.00	18.00	21.50
Jan. 22.....	23.50	22.00	19.10	22.50
Feb. 5.....	21.50	21.50	18.65	21.60
Feb. 19.....	20.00	19.75	17.90	20.50
Feb. 26.....	19.75	19.75	18.60	20.70
Mar. 5.....	21.00	20.53	18.40	20.45
Mar. 12.....	21.00	20.75	17.85	20.65
Mar. 19.....	20.50	20.00	17.00	20.25
Mar. 26.....	20.00	19.50	16.75	19.25
Apr. 2.....	19.00	18.50	15.80	17.50
Apr. 9.....	18.50	18.00	16.15	18.00
Apr. 16.....	17.50	17.50	15.75	18.10
Apr. 23.....	18.50	18.50	17.25	18.90

	St. Louis		Chicago	
	Bran	Shorts	Soybeans	Meal
Jan. 8.....	20.90	23.50	97	30.00
Jan. 22.....	20.90	24.25	103½	29.70
Feb. 5.....	20.75	23.35	104½	29.00
Feb. 19.....	20.00	22.25	104	28.50
Feb. 26.....	20.10	22.40	103½	28.50
Mar. 5.....	20.60	22.45	100	28.00
Mar. 12.....	19.95	22.50	97	27.00
Mar. 19.....	19.20	22.25	99	27.00
Mar. 26.....	19.75	21.25	98½	26.50
Apr. 2.....	18.80	19.75	97½	26.50
Apr. 9.....	19.20	20.15	93¾	25.50
Apr. 16.....	18.90	20.25	93¾	25.50
Apr. 23.....	19.00	20.80	90	25.50

	Cottonseed Meal		Kansas	
	Ft. Worth	Memphis	City Alfalfa	Chicago Corn
Jan. 8.....	25.00	22.00	22.50	62½
Jan. 22.....	25.50	24.00	22.50	60½
Feb. 5.....	25.50	22.50	22.50	58½
Feb. 19.....	25.50	22.00	22.50	59½
Feb. 26.....	25.50	21.50	22.50	58½
Mar. 5.....	25.50	21.00	22.50	58½
Mar. 12.....	25.50	21.00	22.50	58½
Mar. 19.....	24.50	21.75	22.50	59½
Mar. 26.....	24.50	21.75	22.25	60½
Apr. 2.....	24.50	21.10	22.00	61½
Apr. 9.....	24.50	21.80	21.00	60½
Apr. 16.....	25.50	21.25	19.50	60½
Apr. 23.....	24.50	21.75	19.50	60

### WHAT DO YOU NEED

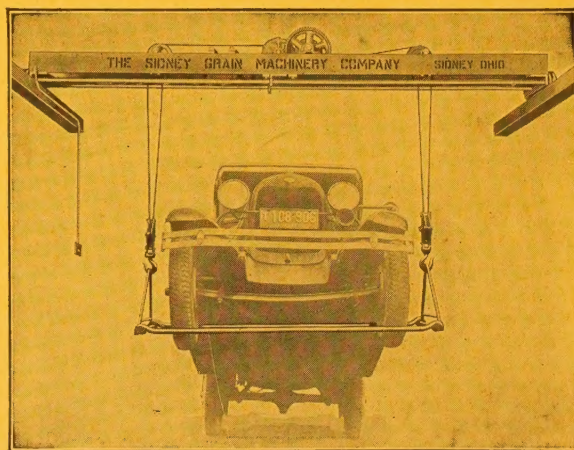
to modernize your plant so it will minimize your labor and increase your profits? Is it here?

Account Books	Hammer Mill
Attrition Mill	Head Drive
Bag Closing Machine	Leg Backstop
Bags and Burlap	Lightning Rods
Bearings {Roller	Loading Spout
Belting {Ball	Magnetic Separator
Bin Thermometer	Manlift
Bin Valves	Moisture Tester
Bleachers and Purifiers	Motor Control
Boots	Mustard Seed Separator
Buckets	Oat Clipper
Car Liners	Oat Huller
Car Loader	Plans of Grain Elevators
Oar {Puller	Portable Elevator
Oar {Pusher	Power {Oil Engine
Car Seals	Power {Motors
Cipher Codes	Power Shovel
Claim (R. R.) Collection	Railroad Claim Books
Clover Huller	Rope Drive
Coal Conveyor	Safety Steel Bash
Concrete Restoration	Sample Envelopes
Corn Cracker	Scales {Truck
Conveying Machinery	Scale Tickets
Distributor	Scarifying Machine
Dockage Tester	Screw Conveyor
Dump	Seed Treating {Machine
Dust Collector	Separator {Chemicals
Dust Protector	Sheller
Elevator Leg	Siding-Roofing {Asbestos
Elevator Paint	Silent Chain Drive
Feed Formulas	Speed Reduction Units
Feed Ingredients	Spouting
Feed Mixer {Dry	Storage Tanks
Feed Mill {Molasses	Testing Apparatus
Fire Barrels	Transmission Machinery
Fire Extinguishers	Waterproofing (Cement)
Foundation Restoration	Weevil Exterminator
Grain Cleaner	Wheat Washer
Grain Drier	
Grain Tables	

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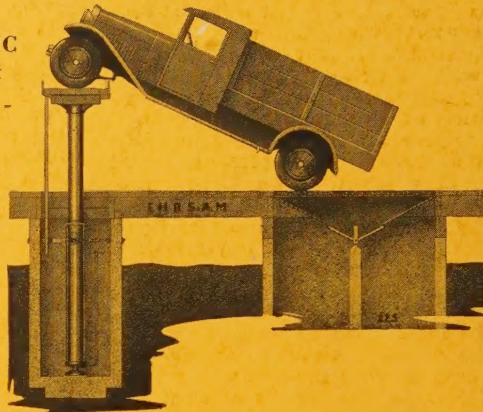
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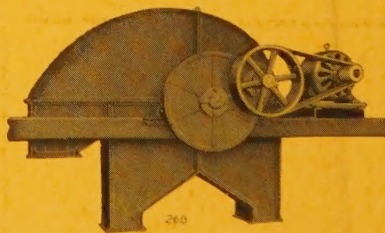


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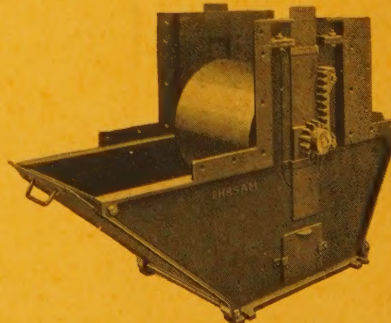
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